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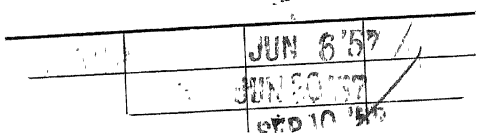

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the challenge of modern art

allen leepa

ASSISTANT PROFESSOR OF ART
MICHIGAN STATE COLLEGE

THE CHALLENGE OF MODERN ART

WITH A FOREWORD BY
herbert read

new york: the beechhurst press

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DESIGNED BY SIDNEY SOLOMON.

to my mother

FOREWORD

THE SCIENCE of æsthetics was originally based on classical art—even a contemporary philosopher of art like Croce never departs from the data of the Græco-Roman and Renaissance tradition. Modern art, however, has made a decisive break with that tradition, and considerable confusion has been caused by the application to its products of criteria of judgment derived from a past historical phase. Even in our private, unprofessional approach to modern art, we come unconsciously armed with such prejudices. What, therefore, was necessary was a complete revision of æsthetics on the basis of the ample material produced by the modern movement in art, and this Mr. Allen Leepa has now provided.

The material in question consists primarily of the works of art themselves, and these, in significant selection, Mr. Leepa has subjected to a thorough functional analysis. But he realises that the explanation of art does not end with its formal dissection—the function of art, as he says, is "to express emotional meanings in the organized patterns of a medium," and he has ventured on the much more difficult task of defining the nature of that psychological process. At this point formal analysis is of no avail, and what we fall back on is the artist's own description of his activity. Luckily modern artists have been surprisingly communicative, and Mr. Leepa has not failed to take advantage of the statements which, from time to time, artists like Picasso, Matisse, Klee and Mondrian have made. He has been aided in his understanding of what they mean (which is not always clear) by

his own practice as a painter, which has saved him from some of the simplifications which an outsider might be tempted to make for the sake of a neat system. Admirable, for example, is the way in which he insists, in Chapter X, on the mutual interaction of medium and idea in the process of creation. We are far too apt to think of the work of art as the illustration of a preconceived idea, instead of an organic growth in which "idea" only played the part of germ or seed.

Particular attention should be given to all that Mr. Leepa has to say on the subject of abstract art, for which the average critic has hitherto reserved his most obstinate resistance. In its various forms (and there is a wide divergence of aim *within* the so-called abstract movement) this type of art does, of course, make the most decisive break with the classical or humanist tradition. It is to be observed, however, that it is precisely this type of art which lends itself to the formulation of a coherent æsthetic; and though Mr. Leepa quite rightly insists on its individualistic and subjective nature, the final result would seem to be the discovery of archtypal forms of the widest social significance. The last point I would like to select for emphasis from a book so replete with interest is the firm way in which Mr. Leepa insists on the social significance of his subject. This he does most directly in his brilliant analysis of Picasso's *Guernica,* but nowhere in this book will those who would like to regard the modern movement in art as a reactionary or escapist activity find any support for their prejudice. We may freely condemn the age we live in and deplore its social iniquities, but it is precisely because he is the last man to have any illusions in this respect that the artist is so extreme in his protest. "Art stems from meaningful experience," as Mr. Leepa very

rightly says. It is because the modern artist is faced by an existential situation of unparalleled complexity that his art, in attempting to resolve that situation, assumes those unfamiliar forms which Mr. Leepa has so persuasively explained.

—HERBERT READ

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The Artist Speaks

ART MEANS different things to different people. To some, painting must tell a story; to others, it must have associative value with some remembered scene. But the deeper meaning of art lies in the appreciation of a painting (or other work of art) as an expression of the artist's mind and emotion. Art is experience communicated directly through a medium. Its meaning for the individual is conditioned by his attitude and emotional response to each work of art. While the word will not substitute for the actual experiencing of a work of art, explanations will help dispel prejudices which bar the way to more profound appreciation.

To appreciate art is to understand ourselves. To know the sources of art is to know how it functions to satisfy human needs.

While there are many forms of expression, many individual interpretations of the inner and outer world of man, there are fundamental considerations in the direct manipulation of the design elements themselves which influence and direct these expressions. Too often the relating of lines, forms and colors is considered only as the structure for expressing feeling about something else, such as a landscape, still-life or portrait. What this book attempts to do is to explain and illustrate how the organization of the design elements themselves in painting can be used to help create a significant expression. This examination involves the consideration of the role of design in giving form to feeling in the creative act, organizing it economically and functionally as an organic and active element of expression.

Van Gogh and Gauguin emphasized personal expression; the impressionists destroyed the realistic object for color and light qualities; and Cézanne was more interested in formal structures than in the representation of realism. If these artists, the forerunners of contemporary art forms, began to re-discover essential factors in creative art apart from realism, then abstract art dispensing with the representational elements, may well have carried forward their contributions. With freedom from representational forms of art (as well as from patrons and other dominating influences), new sources of creative inspiration were tapped.

The "raw" material of art is the same as that of human behavior: body-response, feeling and idea, i.e., body movement (a physical reaction), emotion and thought. In art these three factors combine in an expressive act to form the unique statement of an individual artist. This is essentially the recreation and communication of the artist's self through a medium. We examine in this book especially through the

formal elements how this combination takes place in painting.

One of the fundamental problems of the artist is that of discovering the roots of his own emotional expression and creative experience. Part of the solution to this problem is found in the relationship between the outward appearance of the world and man's inner vision. The expression of this relationship in graphic form by the artist has required the representation of a three-dimensional world on the flat surface of a two-dimensional canvas.

In order to gain insight into modern painting, it is important to know how the flatness of the pictorial plane is tied up with emotional expression, and why the artist is concerned with this as a creative problem. This was succinctly stated by Roger Fry in his book on Henri Matisse as the problem "inherent in the dual nature of painting where we are forced to recognize, at one and the same moment a two-dimensional colored surface and a three-dimensional world, analogous to that in which we live and move." We want to understand the problem of creative expression not merely in order to see how forms are placed in space, or how volume movements are organized, but to learn how the artist puts his inner vision on canvas within the limitations of his medium. The interaction between the individual and the forms in a picture is a profound experience, which has a frame of reference of its own, and is too often ignored or subordinated to everyday experience. If we understand the artist's motivations, feelings, experiences and ideas, as they are influenced by his medium of expression, we will obtain important clues to his product. The creation of art has always appeared to be a mystery. We have not always tried to analyze the creative process for the

purpose of understanding art. This neglect has often resulted in a separation of the art form from the experience of which it is a part. "We have infected the pictures in museums with all our stupidities, all our mistakes, all our poverty of spirit. We have turned them into petty and ridiculous things. We have been tied up to a fiction, instead of trying to sense what inner life there was in the men who painted them." (*Picasso: Fifty Years of His Art,* by Alfred H. Barr, Jr., The Museum of Modern Art, 1946. From a statement made by Picasso in 1935 and originally published under the title *Conversation avec Picasso* in *Cahiers d'Art,* 1935, vol. 10. pp. 173-8.)

This book is an attempt to fill the gap in our appreciation of modern art by approaching it through the artist who creates the pictures instead of through the critic or the art historian. Non-representational work is based on experience and not on escape from reality. The outstanding works of the past and present are marked by a vitality and an inner vision and rhythm that has everything to do with the life experiences of the artist and the time in which he lives regardless of whether the work is realistic or not. Modern art is based on the fundamentals which have made all painting creative and enduring.

It may be helpful to note what a few of the modern masters have said to express their attitudes.

PABLO PICASSO:

". . . Do you think it concerns me that a particular picture of mine represents two people? Though these two people once existed for me they exist no longer. The 'vision' of them gave me a preliminary emotion; then little by little their actual presences became blurred. They developed into

Pablo Picasso: *Head of a Woman.* 1941. (Collection The Museum of Modern Art, New York.) "They speak of naturalism in opposition to modern painting. I would like to know if anyone has ever seen a natural work of art. Nature and art, being two different things, cannot be the same thing . . ." (Pablo Picasso)

a fiction, and then disappeared altogether, or rather they were transformed into all kinds of problems. They are no longer two people you see, but forms and colors: forms and colors that have taken on, meanwhile, the idea of two people, and preserve the vibration of their life.

"I deal with painting as I deal with things. I paint a window just as I look out of a window. If an open window looks wrong in a picture, I draw the curtain and shut it, just as I would in my own room. . .

"When we invented cubism, we had no intention whatever of inventing cubism. We wanted simply to express what was in us. . . There are miles of paintings 'in the manner of'; but it is rare to find a young man working in his own way." (This and all the remaining quotations from Pablo Picasso, except where noted, are from either of two statements, the first of which was made in 1923 to Marius de Zayas and first published in English in *The Arts*, New York, May, 1923, under the title *Picasso Speaks;* the second was made to Christian Zervos in 1935 and published in *Cahiers d'Art*, 1935, volume 10, number 10, pp. 173-8 under the title *Conversation avec Picasso*. Both of these statements are in *Picasso, Fifty Years of His Art*, by Alfred H. Barr, Jr., *The Museum of Modern Art, 1946.*)

PIET MONDRIAN:

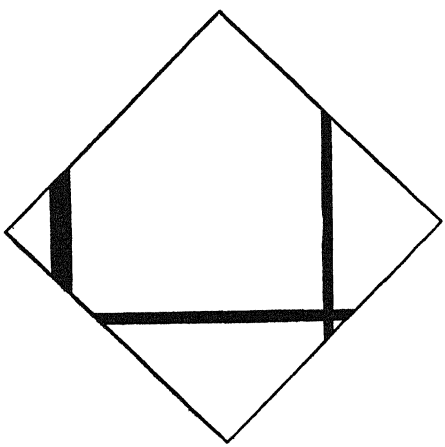
"The art of the past established rhythm not only veiled by subject matter and particular forms, but oppressed by the spirit of the past. When we became more liberated from this oppression, modern art was born. In our time, rhythm is more and more accentuated, not only in art but in mechanized reality and in the whole of life. . .

"As a consequence of the accentuation of rhythm and

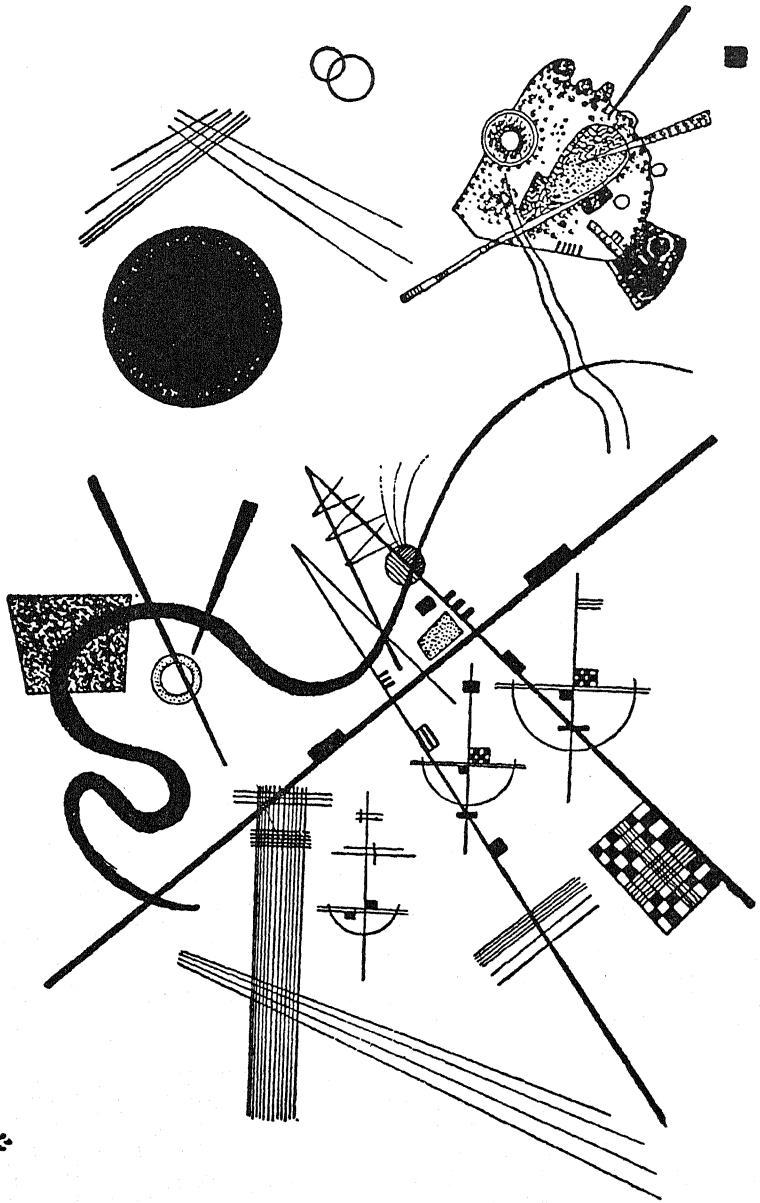
the reduction of natural forms and colors, the subject loses its importance in plastic art. For some, this fact is a gain; for others it is a loss. For some, the subject is a help; for others, it is an obstacle to the enjoyment of the real content of art. Objectively, the subject is more or less tyrannical. It thrusts plastic art into literature, psychology, philosophy —narrative. To enjoy the pure plastic expression of a work of art, one has to rule out the psychological factors that the subject awakens.

"All modern art is distinguished by greater relative freedom from the oppression of the subject. Impressionism emphasized the impression of reality more than its representation. After the impressionists all art shows a relative negation of Nature's aspect: the cubists delivered a further blow; the surrealists transformed it; the abstract artists excluded it . . .

"Throughout the history of culture, art has demonstrated that universal beauty does not arise from the particular character of the form, but from the dynamic rhythm of its



Piet Mondrian: *Fox Trot A.* "The problem was clarified for me, when I realized two things: (a) in plastic art, reality can be expressed only through the equilibrium of *dynamic movement* of form and color; (b) pure means afford the most effective way of attaining this." (Piet Mondrian)



inherent relationships, or in a composition—from the mutual relations of forms . . .

". . . For nature cannot be copied and the predominance of our subjective impression has to be conquered. These plastic exigencies produced Abstract Art . . .

"Both science and art are discovering and making us aware of the fact that *time is a process of intensification,* an evolution from the individual toward the universal, of the subjective toward the objective; toward the essence of things and of ourselves. . . . Through intensification one creates successively on more profound planes. . . .

"We can never appreciate sufficiently the splendid effort of cubism, which broke with the natural appearance of things, and partially, with limited form. Its determination of space by the exact construction of volumes is prodigious. Thus the foundation was laid upon which could arise a plastic of pure relationships, of free rhthym, until now imprisoned by limited form." (*Plastic Art and Pure Plastic Art.* Wittenborn & Co., 1945. This and all quotations of Mondrian by courtesy of Harry Holtzman.)

MARC CHAGALL:

"I detected the realism that lay in the work not only of the impressionists but also of the early cubists: in the former taking the form of a landscape, externally dismembered by the theory of light; in the latter, that of a still

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← Wassily Kandinsky: *Black and White.* "In our contemporaries there still remains the deep-rooted belief in the principle 'l'art pour l'art' in its most superficial interpretation. They are still possessed by the 'how' in art, that they are able to believe that current affirmation—'nature is only a pretext for art, but does not exist in it.'" (Wassily Kandinsky. *Autobiography.* 1918)

life deformed in accord with the investigatings of a third and fourth dimension.

"But all these conceptions seem to me still too material. Nature had to be altered, I felt, not only externally and materially, but also internally, ideologically, without fear of what is called 'literature.' And I think I was right, since today after 18 years of work on my part that tendency is active more violently than ever, under the name of hyper-realism." (*Modern French Painters,* by Maurice Raynal. 1928. Tudor.)

WASSILY KANDINSKY:

"Whatever I might say about myself or my pictures can touch the *pure artistic meaning* only *superficially.* The observer must learn to look at the picture as a graphic representation of a *mood* and not as a representation of *objects.*" (*Cubists and Post-impressionism,* by Arthur Jerome Eddy. 1919. McClurg.)

GEORGES BRAQUE:

"We must not imitate what we want to create. The aspect of things is not to be limited, for the aspect of things is the result of them . . . The aim of painting is not to reconstruct an anecdotic fact, but to constitute a pictorial fact . . . In art, progress lies not in an extension but in a knowledge of limitations . . . The limitations of a method secure its style, engender a new form and lead to creation . . . The senses deform, the spirit forms. We must labor to perfect the spirit; there is certainty only in what the spirit conceives." (*Modern French Painters.*)

CHAPTER ONE

What Modern Art Does

THERE IS no single secret which is going to explain *modern art.* We must first unlock the door to *art.* Modern art and the art of the past are not as different as they appear to be, for they both deal with the same forces. But whereas older forms of art usually created these forces through realistic forms, modern art is free to explore a variety of form.

Some of the following questions are often asked about modern art:

"Why do many modern artists abandon the realistic representation of a scene?"

"Why is modern painting understood only by a select few?"

"Does the modern artist paint abstractly because he cannot draw?"

"Is modern art merely geometrical exercises?"

"What makes good art, and how am I to know what is good in modern art?"

Let us consider our own feelings about art. The following comments were made at random by people looking at paintings in museums and private collections:

A clerk, when asked, "What painting do you like best?" replied, "*Crucifixion* [figure 8] by the Master of the Augsburg Visitation, because it seems to be more genuine than any of the other paintings. When I look at it, I am carried away by its feeling of spirituality. Christ on the cross seems real to me."

A student gives as her reply to this same question, "*Blue Marine* by the American artist Ryder [figure 6]. The sinister effect of the ship silhouetted by the moon and the foreboding mood makes me feel as if I were part of the scene."

An engineer answered, "Because it is so direct and honest, *The Wedding Dance* by Bruegel [figure 12] is my choice. I get the feeling of gaiety. The groups of peasants dancing in their native costumes give me a feeling of joyousness."

And a retired salesman comments, "I go to the museum several times a week to look at the George Bellows paintings. They seem to free something in me. At my age, sixty-three, Bellows keeps the spirit of youth alive in me, his figures are so life-like."

We note that these comments relate to the subject matter of the picture. Each statement displays an emotional reaction by a person who may have had very little serious contact with art, and each saw only what he wanted to see in a picture. It may be argued that each person

enjoys differently the picture he is looking at. But do these people enjoy the painting as much as they could? Is there more to a painting than the obvious subject matter? Is a naturalistic scene or a realistic representation of objects always necessary in a painting to make it a work of art? These questions are significant because when we are asked to go to the opposite extreme and disregard the naturalistic content of a picture, as we have to do in some works of modern art, we may be at a loss to understand it. What has the artist been trying to do in those modern paintings which have no realistic scene, or where the realism has been greatly distorted? When we say we must have a realistic subject in order to appreciate a painting we are stating only one side of the question of art appreciation. What about the artist's side? When we insist that realism is necessary in a painting to make it a work of art, we may base our ideas on the fact that the artist would not have painted a sentimental scene, for example, unless he had wanted a sentimental reaction. But have we considered that there may be other emotions that the artist has communicated in his picture, which may be more important than the realistic aspect? There are some basic emotional factors that underlie works of art which as the moderns have shown very clearly, do not depend on literary associations, whether or not realism is used in a painting. Some phases of art are not immediately obvious to us because of the way we have been conditioned to see, think and feel on looking at a picture. Our likes and dislikes are conditioned early in life and later reinforced or changed. Reinforcement of a taste which prefers representational art is frequent. We are subject to a constant bombardment by slick, photographic,

illustrative advertising, which, whether we realize it or not, can blind us to other values.

Perhaps we really do not understand or appreciate a Rembrandt painting if all we see in it is the subject matter—say a poor old beggar. But how can we satisfactorily account for Rembrandt's painting hanging in a museum while our favorite illustrator's work dies with each copy of the magazine in which it appears?

There is an innate expression in each work of art which does not necessarily have anything to do with its subject matter but with the free and imaginative way lines, forms and colors are combined on a surface. We all drew or painted "abstractly" at one time. "But that wasn't art," one may be quick to exclaim. "When I was a child I may have scribbled and though now once in a while I doodle, what has this to do with art?" While scribbles and doodles may be done unconsciously, they nevertheless may contain an expressive essence that is found in all art, realistic or abstract. Advertising and calendar art, the tastes of our parents and friends and often those of our teachers, and the overwhelming effect of naturalistic perceptual form in everyday life, have conditioned and continue to influence us against seeing this essence.

Art depends on the sensitive and spontaneous expression of the artist's own feelings. There can be as much individual expression in a painting as there is in an individual's personality. Line, form and color put on a canvas by an artist can reflect his inner personality as much, if not more, than can his handwriting. Such an expression will not be made in a painting if it is photographic, since perfectly realistic portrayal will not permit the painter to change lines and forms to *express his own feelings.*

Doodles can be considered to be the "graphic" handwriting of the individual. Through them are revealed many psychological reactions: impulses, fears, compulsions and inhibitions. They can be considered material for art, since they come from the imaginative as well as the subconscious self; as such they are part of the artist's projection. The artist is conscious that this is merely a basic factor which must be developed, molded and organized according to the laws of the medium. While a work of art can reflect the emotions and ideas of the artist concerning the subject matter that he paints, it can also create its own inner life and have an expression all its own. This means that while a painting can be heavy or light in mood, crisp or vague in contour, dynamic or quiet in line, there will be an ever-present expression in that painting which will have the indelible mark of its creator and will be more than the sum of its parts.

If we compare the work of two modern painters such as Paul Klee, figure 53, and Pablo Picasso, figure 4, we note the individual qualities of each. The unique way in which the colors, lines and tones are put together makes each picture different. Next, compare two realistic pictures by old masters, such as Michelangelo and El Greco. Here again there is a difference in the way the lines and forms are related and a difference in the quality and expression of the whole work. Turn these old masters' paintings upside down, if necessary, in order to dissociate the subject matter from the lines, shapes and colors and to see more easily the imaginative and abstract relationships they form.

Subject matter is often purposely omitted by the contemporary painter. He may express his reactions to a scene in line, shape and color only: he is interested in the feeling

that he experiences and communicates through the relation of the forms themselves. Even when the modern artist works from a realistic scene he may have no intention of expressing his feelings about that particular scene; he uses the scene as a stimulus, as a point of departure, and desires to express his feeling freely in the organization of forms in his picture. In recent years, there has been a change in the interest of the artist from the relationships of forms comprising a subject to an interest only in the relationships among forms themselves. Many artists of the past were as much concerned with the pure relation of form on their canvas as are today's abstract painters, but they restricted their forms to recognizable objects; instead of using abstract shapes, they used people, houses, shadows, atmospheric areas of light and dark. In both cases the art experience and the expression of the whole was determined by the abstract relations of form, whether the form was an object or a non-representational shape.

"How can I, as a spectator, experience the emotional content of a painting?" one is tempted to ask. "The artist struggles to create his picture—surely it is not the struggle I'm supposed to re-experience." It is not the struggle, but the emotional intensity which is part of the act of relating forms in the drawing that you, as the spectator, can re-experience. The whole that is produced comes from the fusion of idea, emotion and medium matured in deep and continuous experience. The nature of this fusion as well as an analysis of the art emotion with which the painter works are discussed later.

There are many things that we react to in a work of art besides the obvious or subtle emotional intensity which entered into its production. There is the mood of the whole,

the color quality, the feeling of textural surfaces, the dynamics, or quiet moving effect of the work, the feeling of space and depth, or the lack of it, the atmospheric and tonal effects, to mention but a few. While we can appreciate a painting for various reasons and on many different levels, emotional intensity in the creation and appreciation of a painting is quite fundamental if we are to reach a very deep experience in terms of the art work itself. We are able to determine a basic emotional intensity in painting even though it is conditioned by each artist's ideas, psychic life and method of working—we shall want to know how it functions, and why it is so fundamental.

Painting is the result of basic impulses and discipline. These two, impulse and reason, are sometimes in conflict, but both must be taken into account and harmonized before enduring art is produced. Children's art, which is often very creative, expressive and charming, is rarely enduring because children usually lack knowledge of æsthetic values and how to handle them.

When reason and impulse interact to help one another, a truly creative result emerges. When undisciplined impulse is stronger than reason we have a weak painting. When reason is predominant, the art expression is mechanical in design or is a photographic representation.

In order to have a complete expression, these two factors, impulse and reason, in a sort of opposition, interact with and balance one another to create a fusion of the forces of man's inner world and the environment in which he lives. The nature of this fusion is very delicate and individual.

Man does not exist in a vacuum; he reacts to the stimuli of the outer world, the educational processes, the political

and economic institutions, the social relations of his time. Painting must express fundamental values. These values are not always the most obvious ones. Those that are not easily apparent may be expressed as the result of a profound synthesis and crystallization of the life of man at a particular time through the work of the individual painter. It is not necessary for the modern artist to make a "social" statement in order to be socially significant. A notable exception is Picasso's *Guernica,* figure 74, which is discussed at length in Chapter XI. It is a "modern" painting, and the subject matter makes a definite social statement. This social concern, however, is not merely overlooked in those abstract paintings which disregard subject matter, because actually the artist is always probing for and presenting essentials. Picasso said, "I can't use an ordinary manner just to have the pleasure of being understood." [1] The camera takes its place in picturing reality, and the artist is now more free to express and investigate emotional and psychic fundamentals in creative painting.

That which is of direct concern to the artist, whether it is a social statement with or without a literal message, is important in terms of his larger creative message. What is of meaning to the artist becomes part of his statement; and this statement is a totality, one part of which cannot simply be ignored regardless of whether we as spectators wish to find a social statement of one kind or another in his work. A literal message, no matter how embellished with expressive emotionality, cannot substitute for a more profound, creative and expressive statement.

Today the artist expresses himself symbolically rather

[1] *Picasso: Fifty Years of His Art,* by Alfred Barr, Jr., p. 247, from interviews of Jerome Seckler with Picasso, Nov. 18, 1944 and Jan. 6, 1945.

than realistically, which accords with the trend of the times: to cut through accretion, simplify and pare down; to uncover deeper meanings within man and his society. Modern architecture, furniture design, household equipment, machinery design are functional, and have cut down on all extraneous decoration. Today, psychology seeks fundamental sources of human behavior. Necessity dictates form—the moderns find a beauty in the simple clean lines which emerge. Painting also is reaching for economy of form and new and fundamental sources of creation. But at the same time the modern artist expresses the disturbances of his times, both in the turbulence of his work and in his constant groping. He fulfils his destiny by presaging the future. It may be many years before society catches up with him and thoroughly understands him. But it is his function to point toward the future. Perhaps he himself does not as yet understand his full role. He certainly does not know now the final form of the ideas with which he is groping. The artist today is developing new means of expression, working experimentally to express his inner life, his emotional tension, psychological attitudes and his feelings about the outer world in which he is placed. His work has moral value, since it helps man to study and understand himself as he is, and points the direction toward positive self-expression in all fields. The modern artist directs society's attention toward *essentials* within itself. The same values are expressed as have always been expressed in great art.

"What do you think an artist is? An imbecile who has only his eyes if he's a painter, or ears if he's a musician, or a lyre at every level of his heart if he's a poet, or even, if he's a boxer, just his muscles? On the contrary, he's at the same time a political being, constantly alive to heartrending, fiery

or happy events, to which he responds in every way. How would it be possible to feel no interest in other people and by virtue of an ivory indifference to detach yourself from the life which they so copiously bring you? No, painting is not done to decorate apartments. It is an instrument of war for attack and defense against the enemy." (Picasso.)[1]

Let us seek the relation between feeling and intellect in painting by trying to develop a picture ourselves. Let us start with a subject, since that is of primary concern for many of us.

Suppose you were to draw a portrait of a friend, and you know enough about drawing to get a good likeness. Would you be satisfied to leave it as is, or would you attempt to express your feelings about the subject? And would you design the shapes of the forms and their relationships in the picture to produce a composition that would better convey your emotions? How could you accomplish this? Many things could be done. You could exaggerate or emphasize certain facial expressions in the subject to express your own feelings. Sharp contrasts of colors, and strong oppositions in the directions of lines and masses could, for example, help create a dynamic effect in the whole painting.

Suppose the model posing for your portrait were wearing a bright yellow shirt, sitting in front of a brilliant red curtain having many angular folds. What would the effect be? Exciting, colorful, lively; or quiet, subdued, restrained? Exciting, of course. But suppose the person was in a very sad mood and you wanted to do a moody portrait. Obviously, the colors and lines as seen would not be appropriate. You would have to change them on your canvas, or dress

[1] ibid., page 248, from a written statement by Picasso given to Simone Téry.

the person in different clothes and place him against a different background.

Now, suppose you have done this. What next can you do? Well, you might consider the composition of your picture. What forms go together? In what positions could you place the forms in order to get the best possible composition? You might compose all the forms within a large triangle, giving as your reason for doing this the desire to produce a strong and heavy effect in your picture. But after having composed your forms within this triangle, you suddenly might feel that you needed some form outside of this triangle, in one of the upper corners of the picture. By adding such a form you would not merely be adding variety to your composition for you could be prompted by a feeling, not merely by an idea, to do this. You might have felt in this case a need to balance a heavy form already in the triangle. Your composition is changed to conform with your feelings. (The reason for adding the spot outside the triangle might be more complex and subtle than seeking a balance in the picture. The origin of the impulse to add the spot might have been very spontaneous; perhaps you were unable to give a reason for the addition; your placing of the form might have been intuitive, a doodled expression of what you wished to say, in line, form and color, of which you yourself were unaware.)

But when you change your composition you may feel that you have hit a snag, that you have not really accomplished what you set out to do. That is, your feeling says one thing and your mind another. If you arbitrarily give in to your emotions your composition may be spoiled; it might become a cathartic explosion neither conveying your intellectual conception nor becoming a designed work of

art. If you give in to a preconceived plan for your composition, emotion may be sacrificed.

If you sidestep this issue and overlook the conflict between these two tendencies by insisting that feeling has only to do with atmosphere, or with the emotion expressed on your subject's face, and believe that your design is only a means to achieve a certain type of mood or only the means to carry out a very conscious and literal aim, then you are overlooking one of the fundamental dynamics in art. In other words, it is necessary to develop the relationships between design and emotion in the act of creative expression in painting.

Your concern with this conflict brings up the question of abstraction in painting, for you are considering the relation of your feeling to the principles of your medium apart from subject matter. The spot you needed to add to your picture to balance it involved a limitation of your medium. It was a limitation having nothing to do with realistic content. If the form you added to balance your picture was a realistic object the problem would not change. You would simply be using one kind of form instead of another, but they would both have to be in the same place. That would be an abstract consideration. The factors to be considered are (1) your feeling that one form should be placed on the canvas to balance another and (2) the need to integrate your composition by means of basic design techniques such as a center of interest, variety and movement. Your problem is to adjust emotion to idea without allowing either one to function improperly in the creative act. How this is accomplished is described in detail later. For the present, let us look at some of the usually accepted principles for combin-

ing forms, and examine their relative merits. Here is a list of the elements with which the artist works:

THE ELEMENTS OF DESIGN

Line—which is also considered as contour.
Form—area, mass, shape.
Space—volume, depth.
Tone—light and dark, value, chiaroscuro.
Color—hue and chroma.
Texture—surface quality, rough, smooth; different types of material, such as stone, glass, cloth, wood, and their natural, structural or man-made visual and tactile qualities.

Second, there are the principles involving the combination of these elements:

THE PRINCIPLES OF DESIGN

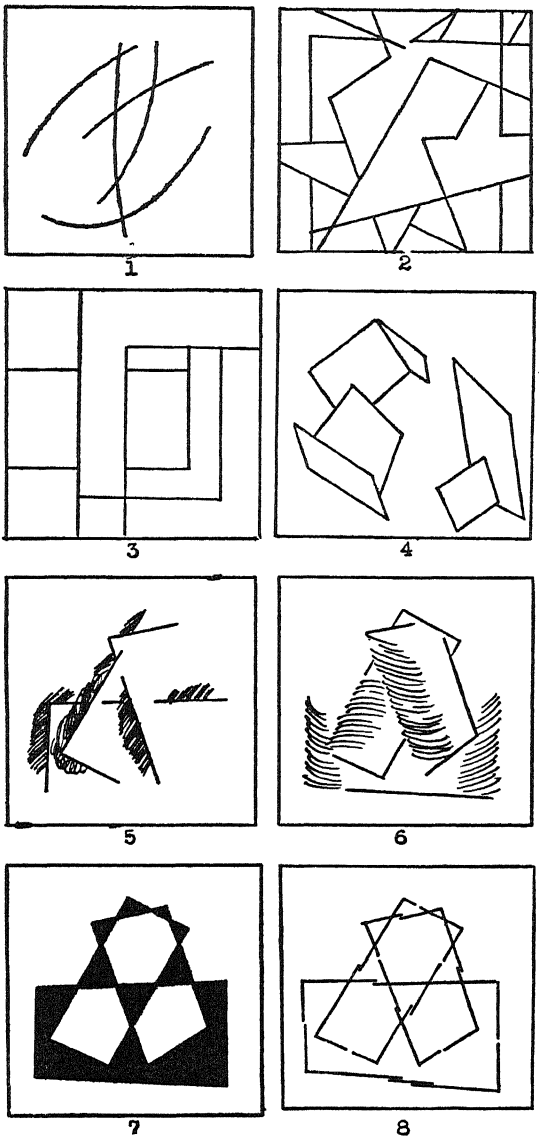
TERM	SYNONYMOUS WORD	EXPLANATION
Balance	Equilibrium Repose	To adjust force or weight Symmetrical balance (formal), like-sided, reversal. Asymmetrical balance (free), (1) central, (2) axial, (3) linear, (4) spatial.
Contrast	Opposition Difference	Contrast of directions and character
Emphasis	Dominance and subordination; Accent; Distinctness; Stress; Center of interest	Emphasis of line, form, tone and color
Proportion	Comparative relation; Fitness of parts; Measurable consistency; Ratio; Scale	Relationship of size, length, height, depth
Rhythm	Pulsation; Recurrence; Regular beat	Rhythm produced by the interrelation of lines, forms, tones, and colors;

TERM	SYNONYMOUS WORD	EXPLANATION
		Emotional rhythm; Mechanical repetition; Using an element more than once; Formal repetition (1) in a row (2) overall in a field; Informal free repetition; Sequence of straight lines, curved lines, shape, size, proportion, succession, gradation, progression
Transition	Connecting	Passage from one place to another; Transition of line, form, tone, color and direction

A design may be based on many different relationships of elements. It may for example emphasize curved lines and angular shapes, diagrams 1 and 2; or it may be based on vertical and horizontal relationships, diagram 3; it may emphasize rectangular planes angularly related in the third-dimension, differentiated by overlapping, diagram 4, by chiaroscuro, diagram 5, by three-dimensional form representation, diagram 6, transparency, diagram 7, shifted lines and planes, diagram 8, by texture and by color. Whatever the relationship of elements, they are organized with reference to the edges and total area of the canvas within which they are placed in a painting.

To design is to adopt means to an end, to arrange, plan or order forms or colors for a purpose. To do this creatively in painting is to arrange the design elements inventively, vitally and expressively.

A fundamental requirement in the coordinating of parts is unity. A composition must hold together. Every design must be unified. The means by which this is achieved are



DIAGRAMS 1-8. Different design elements, relationships, concepts and methods are illustrated and emphasized in each diagram. "The limitations of a method secure its style, engender a new form and lead to creation." (Georges Braque)

dominance, harmony and complementation. Harmony aids by the repetition of similar or identical design elements. Dominance helps through emphasis and subordination. Complementation assists by supplementing, completing, mutually fulfilling design elements, their relationships and the composition as a whole.

If all shapes attract equal attention, then one needs to be emphasized. If there are equal numbers of vertical and horizontal lines, or an equal number of opposed diagonal or curved lines, then one direction is made more important. A center of interest as well as emphasis on one kind of line or one color, for instance, makes for dominance. A center of interest will be created if one form (which does not necessarily have to be a naturalistic object) or a group of forms is stressed by contrasting it with surrounding areas by color, line, tone, shape, size or direction, or by having the main lines of the composition lead to it.

It is almost impossible to make all relations in a picture harmonious; to attempt to do so can seriously limit a design. Too much harmony will produce monotony. Variety and contrast are needed. Design elements and their relation to each other can vary in all respects. Variation can be slight and harmonious, or extreme and contrasting. A great deal of contrast can produce violence and discord; too much variety will produce disunity. Variety enters into all aspects of a picture. It takes account of two- and three-dimensional organization, line, form, space, color, tone, texture, movement, rhythm and proportion.

Contrast, however, need not always produce disunity. Two diagonal lines on opposite sides of the canvas can, while opposing one another in their directions, still complement each other, helping thereby to produce an integra-

tion composed of a strong relationship. Opposition, as we shall see, comprises one of the backbones of emotionally vital relationships of elements in painting.

Proportion is used to produce harmonious relations among parts. A tree whose branches were all the same size as its trunk, would be out of proportion. Elaborate mathematical systems have been developed with regard to the division of the picture plane, from the golden section or mean of 1:1.618 as used in Greek architecture, to the spiral of Hambidge's dynamic symmetry. These have been tested against the work of the past and leave no doubt that artists at various times used mathematics to help proportion their work. But the danger of such systems is that they become a crutch in the hands of amateurs. Failing to comprehend the essential relationships of elements in a painting created out of emotional fervor, the painter relates the forms by a rule of thumb. In the hands of a good artist a mathematical system can be properly controlled.

Pattern is the overall relationship of the individual areas of color and light and dark.

Movement is the action or force given to a line or mass by its direction or position in relation to other elements in the picture. It involves the principle of transition for it includes the direct and indirect passage from one place, condition or action, to another. Movement, in painting, is most strongly realized when opposition is created, for, as in the physical world, there is no movement without opposition, either in the form of friction or gravity. It has often been said that a movement directs the eye: actually the eye itself does not follow the direction of a line in a painting. More often the eye jumps about in a picture. A movement is realized when the person sees the lines and forms in a

relationship and feels a direction. To see a movement and to feel it can be different, though not necessarily separate activities.

Rhythm is movement characterized by regular measure, or harmonious recurrence of stress, beat, accent or motion. There can be a very obvious ordering of the design elements to create recurrence of stress, or there can be a very indirect rhythm, more felt than actually seen. Rhythm, when it is not interpreted literally as the stressing and repeating of like elements at equal distances, producing decorative, but often monotonous designs, is the tempo of the entire picture. This felt rhythm is usually described as emanating from the overall expressive pulsating vitality of a painting, rather than from any easily discerned repetition.

Balance is the state of being in equilibrium. Every picture when considered as a whole must be balanced—if not, the unity is destroyed; the painting is not an integral whole. In a balanced painting the weight, strength, attraction or emphasis of the design elements on one side of the canvas appear to be equal to those on the other side, those at the top seem to equal those at the bottom. This equalizing may be done formally, in which case each element on one side is duplicated in position and weight by one on the other side. This is symmetrical balance. The equalizing of weights which are not exactly duplicated on either side of the canvas, but distributed freely, produces an informal balance.

Since there is no force without energy, and in painting this energy is felt, equilibrium in painting results from the experiencing of oppositely felt energies. (This energy, described later in this book, is defined as emotion-tension.) There is an action and reaction of forces to produce equipoise. But since there is no force without energy that tends

to produce motion, movement and balance are intimately related. Emotion is created by energy, and such energy in a painting is felt: therefore an experiencing of oppositely felt energies produces balance.

There is no exact system of placing forms in a painting. The principles of design are valid as general guides but not as specific means of organizing a composition. The ease with which systems are applied *after* the work is created should not lead one to believe that they were the basis for producing a creative work. There is no simple road to creating a work of art. Art lays bare the very nature of man. Intellectual systems cannot short cut the process.

This is one reason why the artist often projects his feeling first and then reconstructs it, why very rough, spontaneous sketches are made and then slowly brought to maturity by constant changes and development. "A picture is not thought out and settled beforehand. While it is being done, it changes as one's thoughts change . . . When I have found something to express, I have done it without thinking of the past or of the future. If the subjects I have wanted to express have suggested different forms of expression, I have never hesitated to adopt them. Different motives inevitably require different methods of expression. This does not imply either evolution or progress, but an adaptation of the idea one wants to express and the means to express that idea . . . Art is a lie that makes us realize truth, at least the truth that is given us to understand." (Picasso.)

Expression is far too intricate, personal, inventive and intuitive, to be strait-jacketed into arbitrary systems of design. The principles of design are general considerations, many of which are automatically met by the sensitive artist in developing his work. These are intellectual principles for

the combination of forms, but expression depends on emotional and psychic principles and relationships. Emotion must select and direct the conscious design patterns. Automatic expression is inventive; therefore any intellectual preplanned designing is only tentative and will change and be made to live by its subordination to creativeness. The artist can best determine by his own way of work, and by his individual motivation, how much and what type of planning can be used creatively.

CHAPTER TWO

Experience Functioning as Art

THE FUNCTION of art is to express emotional meanings in the organized patterns of a medium. There are as many emotional meanings and organized patterns to convey them as there are artists and paintings. During the process of painting from nature every creative artist reorganizes nature according to his feelings and ideas, as Pablo Picasso so clearly illustrates in figure 49. Differences at once become apparent if one compares a painting with the subject from which the artist worked. We can compare Paul Cézanne's *Millstone in the Parc of Château Noir* with the scene from which it was painted, figures 1 and 2. Pablo Picasso painted several quite different portraits of Dora Maar, as shown in figures 3 and 4.

Even the photographer attempts to express his ideas and feelings about a subject by means of the view he selects, the time of day he snaps it, and by changes he makes while enlarging or developing a negative.

By examining the creative processes through which the artist changes his view, we can get an insight into his painting—we will be able to understand something of what the painter has attempted to give us, beyond the realm of factual nature. The more we become aware of the creative experience in art, the more complete can be our enjoyment of such modern masters as Picasso, Matisse Mondrian, Klee, Chagall, Miro, and, indeed, those masters of the past, Giotto, Michelangelo, Rembrandt, and El Greco, part of whose greatness lies in their mastery of the abstract organic elements in painting.

It would be useful in seeking the roots of the creative act in painting to point out some of its more obvious outgrowths which, though they may not invoke our most profound emotions, do bring forth immediate reactions. Some of these involve story, mood, atmosphere as in Ryder's *Blue Marine,* figure 6. Others include effects of design and composition, such as tactile sensations as in Picasso's *Vive la . . .* , figure 5; horizontal or vertical stability, as in Georges Seurat's *The Sideshow,* figure 7.

If the meaning of music depended upon its adherence to the haphazard sequence of sounds in the street and home around us, its aesthetic value to us would be far less than it is. Music is an art based almost entirely on the manipulation of its abstract design elements: sounds, sound qualities, rhythms and tempos. Our deepest responses are aroused by the organizing of these elements themselves. Profound values in art can likewise be the result of the relationships

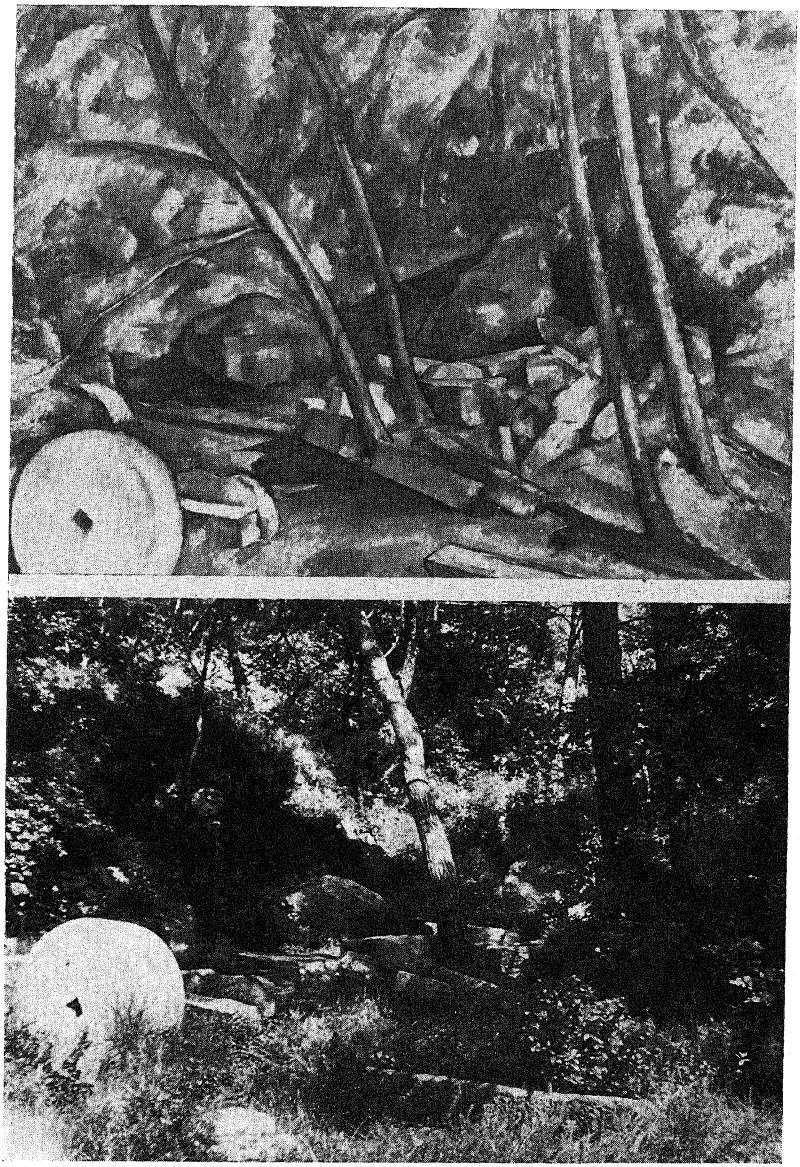
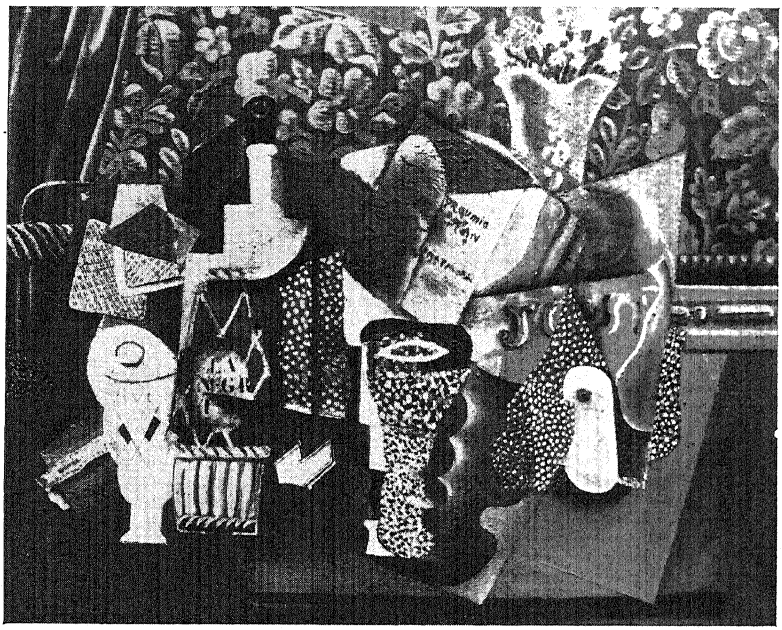


FIGURE 1 (top). Paul Cézanne: *Millstone in the Park of Château Noir.*

FIGURE 2 (bottom). Photograph of the scene from which Cézanne painted his picture. Cézanne changed the scene he painted in order to express *his own* feelings for sensitive relationships of two- and three-dimensional space.



FIGURES 3, 4 (top). Pablo Picasso: *Portrait of Dora Maar.* In these two portraits of Dora Maar, Picasso expresses himself differently about the same subject.

FIGURE 5 (bottom). Pablo Picasso: *"Vive la. . . ."*.

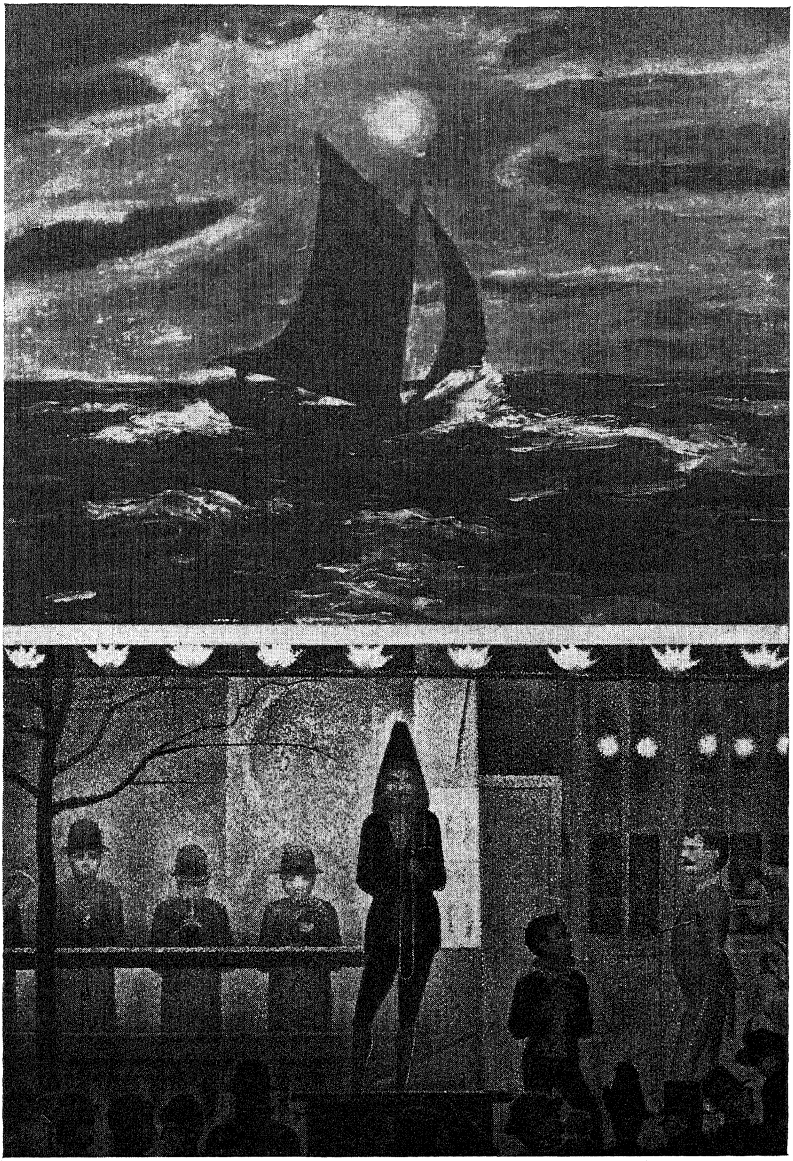


FIGURE 6 (top). Arthur P. Ryder: *Blue Marine.* His imaginative concept of this scene inspired Ryder to create an intensely dramatic mood.

FIGURE 7 (bottom). Georges Seurat: *The Side Show.* Realism has been subordinated to the picture surface.

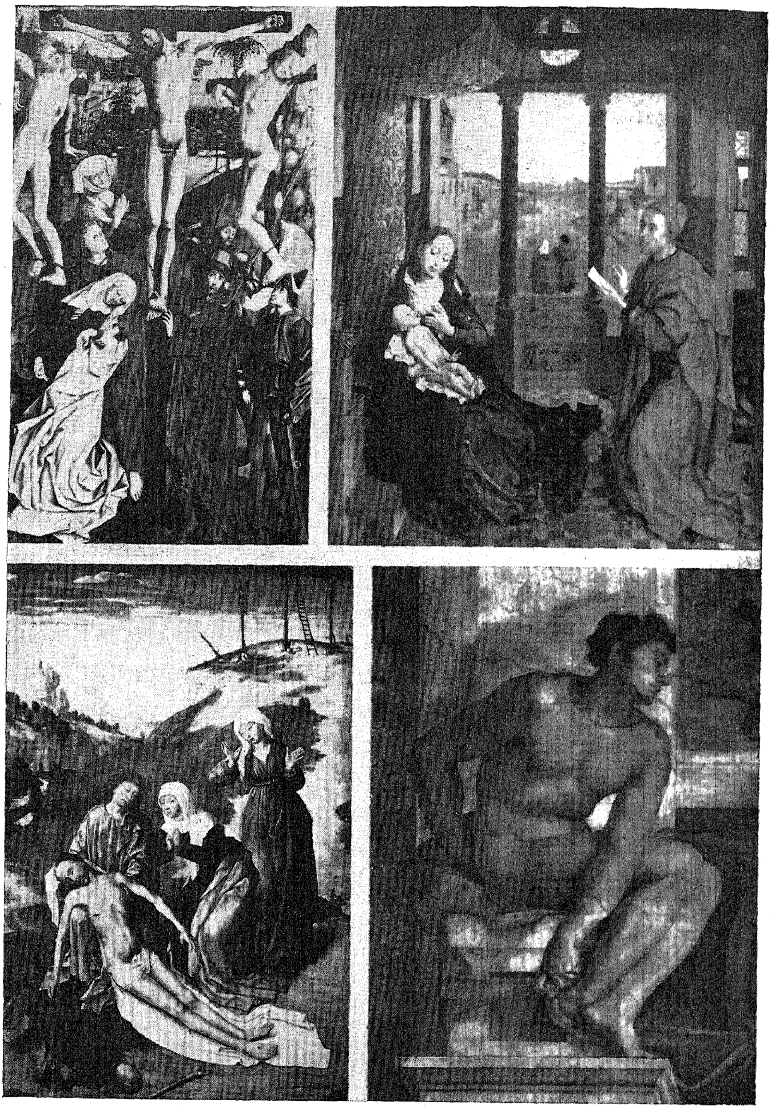


FIGURE 8 (upper left). Master of the Augsburg Visitation: *Crucifixion.*

FIGURE 9 (lower left). Northern French School: *Mourning for the Body of Christ.*

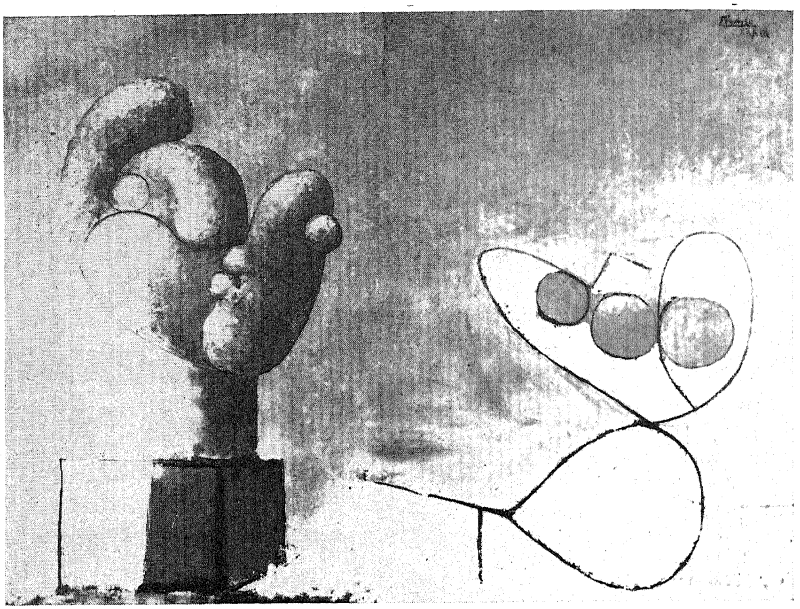
FIGURE 10 (upper right). Roger van der Weyden: *St. Luke Painting the Virgin.*

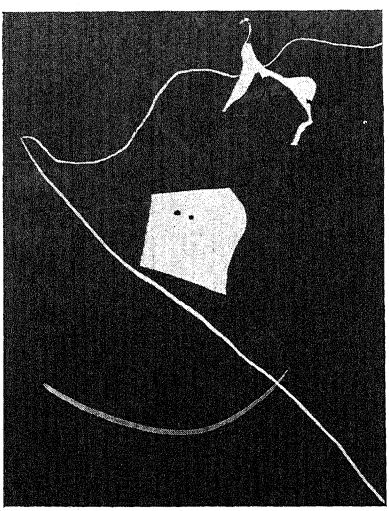
FIGURE 11 (lower right). Michelangelo: *Athlete.* Important changes of concept in the organization of three-dimensional space between the fifteenth and sixteenth centuries are illustrated: frontal plane and exaggerated depth, figure 8; diagonal plane, figure 9; recessional parallel planes, figure 10; and frontal plane and limited depth, figure 11.

FIGURE 12 (top). Pieter Bruegel: *The Wedding Dance.* The seventeenth century artist either emphasized recessional space itself (Bruegel) or subordinated it to strongly related background and foreground areas (El Greco, fig. 42).

FIGURE 13 (lower left) Hieronymus Bosch: Detail of central panel, *Temptation of St. Anthony.* The psychic tension of a period is reflected in the art work: compare the "tight" shapes, fifteenth century, with the robust forms and rhythmic compositional relationships of Bruegel, seventeenth century.

FIGURE 14 (lower right). Pablo Picasso: *Crucifixion.* Compare Picasso's *Crucifixion,* using personal and expressively evolved symbols, with fifteenth centry realistic forms and perceptual space organizations.





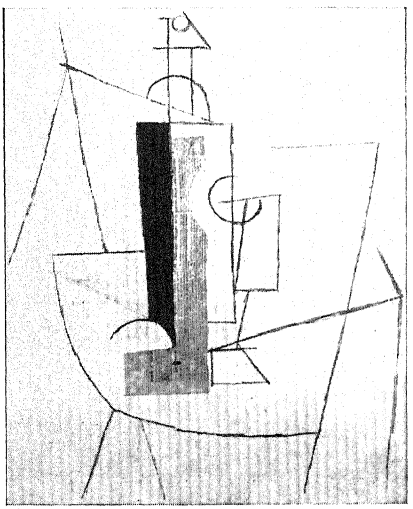
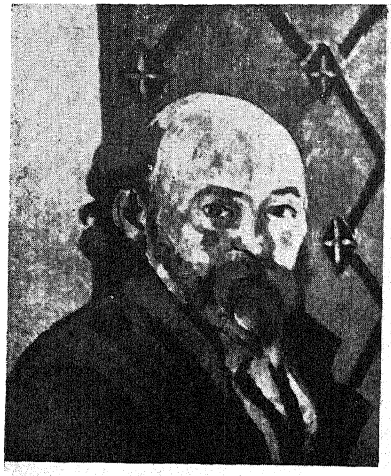


FIGURE 15 (top). Pablo Picasso: *Plaster Head and Bowl of Fruit.* Two space concepts are deliberately combined: realistic and planear.

FIGURE 16 (lower left). Joan Miro: *The Horse.*

FIGURE 17 (lower right). Pablo Picasso: *Still Life.* These paintings illustrate how lines as well as opaque surfaces are used as planes to articulate three-dimensional space.

FIGURES 18, 19. Paul Cézanne: *The Sainte Victoire, Seen from the Quarry Called Bibemus.* The white lines indicate planes; the flat arrows, emotion-tension surface oppositions; the three-dimensional arrows, opposition of two planes (drawn with heavy white lines).



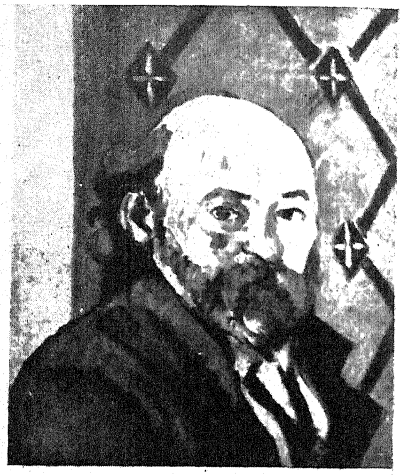


FIGURE 20 (upper left). Paul Cézanne: *Self Portrait.*
FIGURE 21 (upper right). *Self Portrait* with background changed by the author. Such a change often makes little difference to the untrained eye. The strong movement toward the left and the concomitant diagonal movement into depth are not satisfactorily opposed, destroying this work.

FIGURE 22 (bottom). Rembrandt van Rijn. *Nathan Admonishing David.* Rembrandt interrelated background and foreground movements, emphasizing the picture surface.

of abstract elements. Neither mimicry nor skilful recording of the shapes and colors in the outside world are responsible for those qualities in painting which make it most enduring. These qualities are the result of feelings involved in and evolved from the *organization of abstract relations.* To understand such feelings it is of value to examine some of the many changes that are made during the course of the development of a painting, and the factors which prompted these changes. And we shall see that this applies to realistic painting as well as abstract painting.

There are various levels of experience. An artist may copy more or less faithfully what he sees or knows about the objects, people and activities that concern him. On this level, art is mainly the repository of sensory and emotional stimuli, a sort of substitute for memory, a pleasant reminder of how things appear. And the painter himself, being no more than an impartial clerk in nature's storehouse, copying rather than really entering in experiencing or re-interpreting his vision, is not enriched as he would be if he worked creatively. It is rarely possible, however, for a painter to be so insensitive toward his medium that he does not see within it the means to express a multitude of new feelings.

When the urge to explore his medium leads the painter to a more critical attitude toward himself and ways of treating his subject and his medium, inevitably there follows a marked change in his paintings as he reaches for a new goal. (Medium is used in this book to mean both physical materials that the artist uses, such as pigment and canvas, as well as the possibilities and limitations for their creative use in a composition.) Creative processes begin when a goal cannot be reached by habitual patterns of action. Instead of outlining objects as they appear, the artist will begin to

change these shapes in ways that emotional relationships in the picture create. Rather than using color to reproduce the hues and tones before him, he will begin to allow a freer play of the forces deriving from his own conceptions. The relation among the painter, his medium and his subject is anything but passive. He has been influenced by his medium, he in turn is imprinting himself on the canvas. Both he and the painting change: he, psychologically and emotionally; his painting, organically and structurally. A subject, feeling, or conception can begin the creative process. They may be stimuli, points of departure or goals for the artist. The artist does not work from a void, but uses some subject matter from his experience or his environment. (All art may be said to have subject matter to the extent that a form suggests a naturalistic object to the spectator, or that in working from a scene there has been a transference of the most representative features of the scene; a compositional or psychological idea can also be referred to as a subject in painting. The artist may begin his painting with an arbitrary relationship of lines, forms and colors and develop compositional and psychological ideas as the painting develops. Any form that an artist uses, whether recognizable or not, has a relationship to his subconscious experience and is therefore here referred to as subject matter.) The subject influences the feelings and ideas of the artist, which in turn are tempered by the medium, each having to come to terms with the other, with the result that the painter organizes the medium into an embodiment of his feeling.

One of the outstanding traits of modern art has been rejection of the outward appearance of the world and the expression of the subtle, less obvious forces. This process is called abstraction. To abstract is to take out of, to withdraw

from, to separate from, to abridge. To abstract a thing is to distinguish differences in it, separating one or more elements from others, the important from the unimportant; there is an extraction or distillation of the essence of a thing. The emotional relation of the individual to a medium, is subject to an introspective examination, with the results crystallizing in a changing, developing and more imaginative expression. This takes place operationally. That is, "Experience is never yours merely as it comes to you, facts are never mere data, they are data to which you *respond.* Your experience is constantly transformed by your deeds." (William James, *Talks to Teachers.*)

Abstract can also mean something considered apart from the concrete; something that is ideal, imaginary and abstruse. Abstract art appears abstruse when realism is looked for; but its meaning becomes clear when some of the felt forces comprising the work of art are experienced. Abstract work might then be considered very "concrete," for it deals with deep and mature creative experiencing in and through a medium. If this is the case we would conclude that the creation of important art forces would justify any type of expression and any use of forms that aided it. To understand modern art, we have to respond with different meanings than we ordinarily do to realistic scenes. A greater burden is placed on the spectator than ever before, because he is asked to change the attitude with which he approaches a painting. More is demanded of him; he is forced to participate even more in the work than ever before. Realism, in other words, can no longer be an easy route for escaping other experiences in a work of art.

Abstraction as used in this book, then, means that a selection is made of significant emotional and intellectual

factors, realized as being an important part of the creative act in art, and these are organized, tested and integrated with one's own ideas, feelings and personality. When subject matter serves as a stimulus, as a point of departure, for the artist's creative activity, the word *abstraction* is usually used; and when the artist works without utilizing or referring to a subject, the word *non-objective* is used; though, even when working from nature, non-objective relationships can be created. (Strictly speaking, a non-objective painting does not at any time in the process of its creation refer to nature, that is, to a naturalistic scene, or literal theme; while an abstract painting does refer at some time in the course of its development to nature which is used as a stimulus, inspiration or point of departure.)

The artist is often unable to tell beforehand how his painting is going to turn out, because it develops as he paints it. Even with a particular compositional or subject matter in mind the design of a painting changes as one form is added to complement another and as these forms create new and unanticipated relationships when seen in a *whole* composition. A painting grows like a living organism in the artist's mind and feelings as he interacts with his work at different stages in its development. The artist realizes what the layman has experienced but cannot express. The artist frees original fantasies, aims, desires, and emotions, and expresses them through his medium. But the medium has limitations of its own. There are feelings that can or cannot be translated effectively into a particular medium. In considering these limitations, the artist must realize how he changes the material and also in what ways the material changes his expression and his conceptions.

All interaction between the individual and his environ-

ment is subject to the limitations of natural laws. There are personal limitations growing out of one's own feelings, adjustments, ways of thinking; and there are external limitations growing out of laws of physics, social mores, milieu. It is in the conflict between the limitations of the outside world (or the medium in art) on the one hand, and the demands of the individual himself on the other, that an important problem of life and art is found. If the artist follows his feelings, disregarding the limitations of the medium, or if he subordinates his feelings entirely to these limitations, he does not create a strong painting: it lacks vitality. If the artist does not relate his forms to each other and to the canvas, the expression of the painting will also be limited.

Solution of the conflict between the artist's inner needs for expression and the laws of the medium is to be found in an integration of both; sometimes it is necessary to compromise or even abandon the original ideas with which the artist begins his painting for those arising out of the creative process, that is, as he works. The direction is taken from the painting process itself. The process is continuous and, in a sense, unending. A painting is never quite finished, any more than are the experiences of the artist.

The artist attempts to release those inner forces at work during the process of creation, and by releasing them to charge his working hours with emotional intensity and imbue his painting with vitality.

The problem of satisfying the emotions and also the requirements of the medium, of fusing feeling and idea, is in a larger sense the eternal problem of completely satisfying one's own inner needs and the demands of the outside world. The solution is not in passive compromise, but in

reaching a creative adjustment. The artist's work is imbued with meanings for him and for the spectator far beyond the factual. As Paul Klee has stated:

"The ideological capacity of man to penetrate earthly and supernatural spaces at random—in contrast to his physical prostration—is the origin of human tragedy. This combat between power and prostration implies the whole discord of human existence. Half winged, half imprisoned—that is man. . .

"The revelation: that where there is a beginning there can never be infinity."

So far our discussion of the nature of the experience that takes place in a painting has necessarily been very general. We will want to understand more specifically how the broad meaning of experience is qualified while functioning in art expression. We will want to know the tools the artist uses, and how and why he uses them. We will want to analyze the background of his present thinking and acting. The next three chapters, therefore, deal with the background and development of modern art; the three following that with the tools and vocabulary of vision with which the artist is concerned; beginning with chapter X, we are concerned with how the artist works, applying operationally the body of meanings which we will have developed.

CHAPTER THREE

The Background of Modern Art

THROUGHOUT the history of painting the artist has been continually enlarging his vocabulary. He has become aware of new representational techniques, new organizational methods and different subject matter. Whenever painters needed to express new ideas, they had to find or make new forms for them. They found these forms through a search in which they learned more about the possibilities of painting.

There are no clear-cut standards for judging a painting; "beauty" has different meanings for different people, and individual tastes change: with growing awareness to new relationships, a person may derive great pleasure from works of art formerly disliked. The aesthetic value of a

work transcends the fashion of the times or, for that matter, the individual's personal preferences. The question of the aesthetic value of a work of art itself has little to do with whether or not it appeals to the layman.

Different aesthetic values exist in works of art, but exact standards for their measurement do not. All judgment depends upon your own experience, and growth in art appreciation involves, basically, the same factors as growth in life. Learning comes from change in the individual through the integration of experience and personality. The only thing that can be said in establishing a standard for art is that the great works can potentially communicate a great depth of emotional experience. This is quite different from associating emotion and idea in a sentimental interpretation of a scene in the natural world.

What makes each painting great, then? It is the communication of the artist's intense creative experience through a medium, it is a projection of his creative action and reaction, equilibrium and disequilibrium as the painting develops, the result of the integration of imagination and insight, regardless of whether he used large sweeping forms, or small quiet ones, very realistic, semi-realistic or abstract forms. The outward forms only clothe the inner artistic significance of the work. Education for the spectator in the creative experiencing of art is as much needed in this field as in any other. A new language must be learned.

When art fails to mirror life it fails as art. Mirroring life, however, does not mean copying it. The artist does not merely set down a photographic record of his times. Rather he reflects in his work the tempo, attitudes, aims, hopes, tensions, successes and failures of his era. He transposes these through his work. Because he is a member of society he in-

tuitively expresses its heartbeat. And when he works creatively he indicates to society a spiritually progressive direction. One has but to walk through one of our great museums to realize the feelings and ideas—the way of life—that were important, consciously and unconsciously, to the people of a particular epoch. The restrained emotional intensity, the medieval mystical mind of the early German and Flemish painters, for example, contrasts strongly with the frivolous, gay, carefree work of the French eighteenth century court painters, such as that of Antoine Watteau.

Works of art are permanent records of the feeling and ideas of many of the more sensitive people of the society. Though the artist expresses himself individually, there is nevertheless a consistency in the style of each period. Even when the techniques of a period have been adequate for that period, the next generation of painters finds new techniques in order to express new feelings and ideas.

The consistency of style in each period is due not only to the spirit of the times in which the artist worked, but to the representational and organizational techniques available to the artist of that period. The artists of the fifteenth century could no more paint like those of the sixteenth century than the impressionists could work like the cubists. It is a mistake to believe that with some artistic facility comes the ability to use creatively any type of art form possible. Those artists who work only with the techniques of a preceding epoch and do not intrinsically add to it, do not create. The very nature of the creative process requires the carrying forward of what has already been said.

To make important contributions to the art form, the artist must be aware of his heritage. The artist's method of becoming familiar with the work of his predecessors is not

primarily an intellectual process, nor does it necessitate the experiencing of all the preceding forms of art.

The artist intuitively grasps a fundamental truth discovered by previous artists, for such truths are closely related to his experience, since they already exist. Earlier forms are stepping stones in helping the artist discover the underlying truths more quickly. The artist, of course, grasps truths of the creative experience through his own creative struggles, and the preceding art forms act as catalysts.

Art is not the result of intellectual investigation alone; it is primarily emotional: the intellect clarifies the emotional and intuitive gropings. The discoveries of new forms of art were prompted partly by the tempo of the era, partly by the resulting restless, searching creative spirit of the artist. He sought to express his deepest feelings and to make his art as meaningful as he could. Rembrandt emphasized the overall design of his painting, subordinating the clarity of individual objects. But he did not decide to do so just to be unique. Rather his creative searchings gave rise to this new emphasis in his work. In his strivings he developed a new way of seeing and understanding not merely the things in the world about him, but their relations within his pictures.

Creative action is characterized by, first, the desire and need for self-expression; second, dissatisfaction with old ideas, forms and methods of action; third, relation of existing problems, ideas and feelings to past experiences; fourth, experimentation with new forms, the use of imagination with the development of insights; fifth, a subjection of this imaginative experimentation to reality; and sixth, generalization and integration of resulting ideas and feelings with operational behavior.

Modern art has grown out of the art of the past. It is not a lesser form of art. While there have been cycles in the art of the past, greater and more ingenious art works at one time or another, there has also been an ever-greater spiral in the freedom with which the artist has expressed his inner feelings and ideas. Art has become abstract out of creative necessity. Individual works of modern art have expressed the same creative genius that has marked all great art of the past. The fact that there has been a growth in the understanding of the creative experience in art, which has resulted in art devoid of naturalistic subject matter, does not mean that other forms of art are not significant. The artists of the past were concerned with many of the same creative problems in painting as those of today. The depth of experience that can be projected into a painting is not limited by the lack of knowledge of representational techniques; for in the past, great art was produced during those periods when knowledge of naturalistic representation was limited. Examples can be cited from Paleolithic, Egyptian, Greek, or early Italian art, to mention but a few. The old masters achieved the highest emotional intensity working on their creative problems, as the modern artist does on his.

The modern painter is more self-conscious; he is more aware of and feels free to experiment with and emphasize personal feelings and ideas. Artists of the past, while realizing the creative nature of their art, could not yet dissociate it from the naturalistic object and work with it separately as do modern artists. They were not aware of its existence as a separate entity apart from realistic subject matter. New freedoms and understanding had to develop before they could take the steps the modern artists have taken. Artists of the past experienced the same emotional intensities in

relating forms on their canvases as the modern artists, but the contemporary painters have emphasized it to the subordination of realistic subject matter. The artists of previous times did not have available as large a vocabulary of painting forms to enlarge upon or through which to express themselves as does the modern artist (an outstanding example of this lack of technique is illustrated by those paintings done before the discovery of perspective during the Renaissance). The modern painter has been able to find new relations because he has a larger background to select from and to guide and integrate his art experiences.

The political, economic and social forces that stimulate new urges in the heart of man, chart the course for experimentation, research and new discoveries. Man must express himself. His history is a history of discovery and invention. It is a history of searching to understand and control nature. The more political and intellectual freedom men have won, the more freely they manipulated their art forms to express their ideas and feelings.

The cyclical development of art forms has been continuous from earliest times. The changes in the art forms of the past resulted from the creative researches of the artists to express new feelings and ideas; the political, economic, and social forces affecting the artist; the development of painting techniques.

Prehistoric art, early Christian art, and the Italian primitives are great periods in art. Their plastic quality, emphasis on design, simplicity and sincerity appeal strongly to us. However, in the following brief sketch of the history of art, the emphasis will be on the development of spatial organization and conventions of representation, since we will be

concerned with the background of the modern artist's concept of space and form.

In early times man drew semi-abstractly, not only because his ability to represent three-dimensional space was undeveloped, but because his art served symbolic or magical ends.

From the time of Paleolithic man to the Roman period, there was a gradual improvement in representational skill; this resulted both from a better knowledge of the representation of depth and from the abandonment of the use of art for formal religious purposes. This cycle from symbolism to representational drawing is repeated again during the Middle Ages, from the Early Christian and Byzantine art to the Renaissance. And if we simplify the many movements from the Renaissance on, a third cycle in art proceeded from naturalistic representation to abstract drawing, which in turn might be the beginning of still another cycle.

The kinds of changes in the past that interest us here are: the change from conceptual to perceptual drawing, as from the Paleolithic artists to the Romans, and the change from symbolic to visual representation, as from the Byzantines to the High Renaissance.

By the change from conceptual representation to perceptual representation is meant a change from drawing what is known about an object to the drawing of what is actually seen of the object as it appears in three-dimensional space. Though in a broader sense, working conceptually also means working with an inner idea, molding the art form to conform. Refer to diagram 9. (The ability to draw a representational profile or a front view of a person without representing the third dimension is here considered as conceptual drawing.) This change comes from an increase in

visual awareness and a growth in technical facility. The child, for example, draws what he believes and knows, rather than actually what he sees; that is, he draws conceptually, not visually. He draws a rectangle for a table as it would appear from above and then adds the legs as seen from the side. He knows that a table is rectangular and he knows that it has legs, but he cannot draw them in visual perspective because he cannot correlate his perception with his conception. When his perceptual abilities grow and he is able to correlate what he sees with what he draws, he will be capable of perceptual representation.

A change from symbolic to visual representation is a change from the drawing of an invisible world above and beyond every day reality to the drawing of a changing world with emphasis on its momentary visual phases. Symbolic representation is seen in early Christian and Byzantine art where naturalistic representation is deliberately overlooked. Space and three-dimensional form is lacking. Despite the fact that realistic techniques developed during the Hellenistic and Roman periods were known to these artists, they were rejected. Art characterized by visual representation emphasized the momentary aspects of a scene in life or in nature. In the work of Rembrandt, for instance, there are often views of scenes with figures and lighting caught momentarily and with diffuse outlines, as in *The Virgin and Child with the Cat and Joseph at the Window.* The effect is that of a scene with its actions temporarily suspended. Contrast this work with Andrea Mantegna's *Madonna and Child* in which the scene appears fixed and immobile. Here there is an idealized conception with a clear and exact representation of the subject. The works of the impressionists are also good examples of the visual category,

DIAGRAM 9. Art expresses man's feelings and ideas, and changes as he changes in accord with concepts of self and the world and the development of representational skills.

for we find that instantaneous impressions of a scene are painted.

(ABOVE) Rembrandt: *The Virgin and Child with the Cat and Joseph at the Window.* 1654. Etching.

(LEFT) Mantegna: *Madonna and Child.* c. 1460. Engraving.

Modern non-representational art is different from symbolic art in that it does not dissociate itself from reality to diagram a super-sensory mystical realm, but deals with sensuous experience. On the other hand, it is not visual, in the sense of following the fleeting outward appearance of objects. And it is not perceptual, for it does not seek to represent objects realistically (see diagram 9). It is a form of art which has rejected perceptual representation and emphasized designed relationships for their own sake.

(Modern art is the result of the artist's creative search for truth through an empirical method. The artist examines and questions his sensations and their relation to his ideas of organization in a medium. He founds his art on the pragmatic results of his examination. The forms he uses represent this experience. (All of this occurs when the artist works creatively, even though he does not always dictate the type of expression, but allows creativity free play. An absolutely pragmatic and instrumental philosophy will not readily explain aesthetics for the difference between art and science parallels the difference between expression and photography.)

FROM EARLIEST TIMES TO ABOUT 10,000 B.C.:

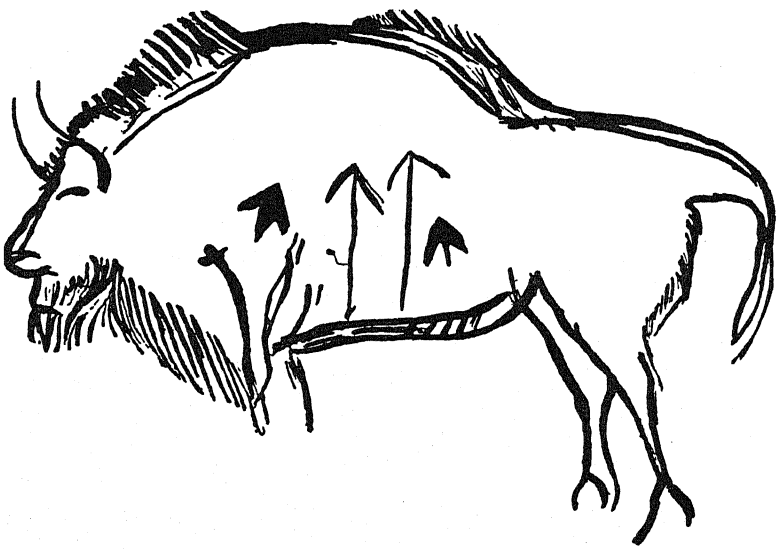
Paintings done during the Paleolithic era were two-dimensional. They were both conceptual and symbolic. Techniques for three-dimensional drawing had not been developed. The art was characterized not only by spacelessness, but by a transparency when forms overlapped, and by formalization or stylization. There is, however, a fluidity of line and a direct and genuine sincerity of expression.

The drawings are symbolic since they are believed to have served a religious or supernatural magical purpose;

the arrows drawn in the hide of the animal were probably meant to bring success in the hunt. Animals are most frequently represented, human beings less often. There are drawings of bison, horses, ibex, mammoths, fish, seals and birds. Paleolithic art, while beautiful in its expressive line and shape, was an art of profile drawing, with few suggestions of depth or organization according to one optical point of view. Groups of forms were indiscriminately overlapped without regard to a horizontal ground plane on which they were placed or to their position in depth.

FROM ABOUT 4500 B.C. TO 1090 B.C.:

Egyptian art introduces for the first time a definite picture plane the imaginary transparent plane created by the



Drawing of bison on cave wall. Several arrows, two of which are red, point at the bison, serving perhaps a magical purpose.

frame,) i.e., the canvas through which the imaginary third dimension of a picture is seen). In order to present the idea that one figure was behind another the artist placed one directly above the other. Occasionally an arm overlapped a figure or a three-quarter view of a head was shown, but for the most part the front and profile of figures placed one next to the other were shown. Conceptional drawing, rather than perceptual, was the dominant type of representation. There is a beauty of decorative design, a decisiveness of line in this work, nevertheless. (For a brief period during the reign of Ikhnaton [1375-1358 B.C.] who broke politically and religiously with tradition, a tendency toward naturalism received great impetus. Curving lines supplanted angularity and stiffness. Ikhnaton's break with tradition was short-lived, however, and the traditional Egyptian art forms returned.)

FROM ABOUT 3000 B.C. TO 606 B.C.:

The next important change that was made in representation is observed in Assyrian art with the drawing of the profile of an entire figure. (In Egyptian art, frontal and profile views were used together when a human being was represented.) In other words, one optical point of view was established. There were also some attempts at foreshortening. Although forms were conventionalized, Assyrian work is impressive in its simplicity and directness of statement.

FROM ABOUT 2000 B.C. TO 400 B.C.:

In Greek painting, for the most part done on vases, figures are placed at different heights on the surface to suggest depth. As we trace the development of representation of form and space in Greek art, from the Early Greek

and Archaic Period through the Hellenistic age, we find a gradual understanding of foreshortening and the representation of depth. This was a slow process, for even with foreshortening and the placing of more distant figures in space higher on the painting surface, the sizes of objects placed at different depths sometimes remained the same. Even as late as the first century B.C., we find inaccuracies in the representation of depth. For example, in wall paintings of houses the roofs and balconies slant into depth at distorted angles.

FOURTH CENTURY AND HELLENISTIC AGE:

Yet in Hellenistic and Roman art, great strides were made in realistic drawing. Modeling and a three-dimensional stage-like representation of space were used. Shadows and atmospheric lighting, progressing from dark in the foreground to light in the background, were used to create depth; modeling and three-quarter views of objects were shown.

The art of the Roman period reached a climax so far as representational development was concerned. The next art forms, instead of continuing in the development of perceptual and visual understanding, again reverted primarily to symbolic drawing.

THE FIRST FIVE CENTURIES A.D. IN THE WEST; 330-1453 A.D. IN THE EAST:

The people of the Middle Ages expressed their belief in the supersensory religious world through painting that was flat. The representational techniques of the Roman period were available but not used. It was not again until

the Renaissance that perceptual drawing was further developed.

Figures of saints done in mosaics during the Byzantine period were drawn flatly, with no modeling, in two dimensions. Figures were stylized and the frontal position was emphasized. The natural appearance and relationship between people did not interest the artist. Interconnecting design was held at a minimum. The ground plane, clearly receding in Roman paintings, often became a stratified band parallel to the picture plane.

The early medieval artist did not represent space realistically not because he did not have the technical knowledge to do so, but because he sought an art form symbolically adequate to the ideas and feelings of the times. These artists reflected the medieval man whose religious beliefs were devoted to the life hereafter. There was a distinct separation in the painter's mind between worldly everyday existence and the spiritual supersensory one.

The paintings of these early Christians were used in the churches and showed absorption in supersensory experiences; a world as ascetic as the figures they portrayed. While working in such a restricted manner the artist nevertheless created a wonderful decorative quality, imbuing his work with a mystical consecrated feeling.

From the break-up of the Roman empire, through the Dark Ages, to the beginning of the Renaissance, man was beset with multitudinous fearful physical difficulties. With the establishment of some order and the development of the Feudal system, the serf was kept a servant both physically and spiritually to the particular lord whom he served. Disease, wars, poor crops, all lent their share to his misery and

his insecurity. Religion offered one escape from the worldly miseries which he suffered.

The impact of the Crusades, the development of secular culture, the growth of humanism and the rise of cities, all had an effect on art. Drawing began to show the relation of forms in the artist's whole picture rather than the previous emphasis on the isolated figure. He ceased to separate the world sharply into two, subordinating the worldly to the supersensory. As he began again to think about the secular world, he saw related structures in his paintings.

CHAPTER FOUR

From Renaissance to Twentieth Century

With the advent of the Renaissance, lay patronage came into prominence, partly replacing church patronage. The stylized and didactic forms which expressed the asceticism of the Church and the thought and feelings of the Middle Ages gave way before humanism.

The intuitional mysticism of the Middle Ages gave way to rational thinking. The Renaissance interpretation of experience derived from the investigation of the world as we know it through our senses and a correlation of these sense experiences through the scientific method. Nature was studied in order to understand and control it, and life was rearranged according to its laws. The art of the times re-

flected this integration of nature, idea and emotion. There was a reawakened interest in painting the natural world, in exploring and expressing personal feelings and ideas about it, and finding new and suitable expressive techniques. The artist saw design relationships in his drawing, and between the drawing and himself. As the Renaissance developed, he was freer in his interpretation of the world; he used the figure as it served his purpose, placing it in scenes and situations that expressed his own ideas and feelings. The changes in realistic representation and pictorial organization illustrate the trend away from exact representation, and parallel a similar reawakening in contemporary art. Even though the realistic object was not entirely abandoned until the twentieth century, its exact representation became less and less important.

FOURTEENTH CENTURY:

The first of the great Florentine painters, Giotto (1276-1336 A.D.), showed the new spirit of the Renaissance and the gradual break with the Early Christian art. The sensitive simplicity, elimination of the nonessential, the harmonious integration of mass, and the bold statement of the lines and structure of the design, all emphasized the essential aspects of the story being told. To this purpose there was a subordination of the individual features of the figures to larger and more general design essentials. There was a deep sense of the calm in his work. While the universal rather than the personal was emphasized, it was no longer merely the general scene that was shown, as in Early Christian Art, but the heart of the particular incident; and while the figures were similar, they were no longer erect

and singly emphasized, but combined to fit within an overall, rhythmic design.

Giotto's figures were not merely symbols of men and women but forms that had mass. In his work there was a real sense of the third-dimension, of space and mass. Perceptual form and space representation made its re-entry during this early period of the Renaissance for the first time since the late Roman period.

In Giotto's work the adherence to the surface of the painting was marked by the creation of an imaginary frontal plane produced by the arrangement of parts of the figures into a plane parallel to the painting surface. Giotto made little use of light and shade; it was his line that predominately indicated the structure of his work.

FIFTEENTH CENTURY:

It was not until Masaccio (1401-1428 A.D.) that modeling, the cast shadow and an atmospheric handling of space were brought into prominent use. In his painting the frontal plane was at times almost completely disregarded, and a strong space movement diagonally into depth was created. While a plane parallel to the surface of one of his frescoes is evident, the space between it and the picture is broken for the first time by the introduction of a figure.

Heretofore the artist felt firmly bound to the picture plane. While the Early Christian and Byzantine artist decorated it, Duccio, Simone Martini, Giotto and his followers, organized dominant forms and surfaces in the third-dimension parallel to it. Masaccio, on the other hand, displaced his forms in space with greater freedom, giving at the same time more emphasis to a perceptual representation of form and space. More naturally postured figures and light-

ing effects are to be seen in his work. Masaccio's interest in perspective, light and shade, anatomy, and the movement of the human figure, influenced other leading painters of the fifteenth century: Antonio Pollainolo; Paolo Uccello; and Baldovinetti; to mention only a few. Other painters such as Fra Angelico, Fra Fillippo and Botticelli continued the medieval tradition of pattern and rhymic line.

Along with the growth in understanding of three-dimensional representation, the use of light and dark, shadow, the discovery of perspective, there was a change in the organization of the canvas space. The fourteenth and fifteenth century primitives were bound to the surface of the picture in a way derivative of the flat frontal plane representation of the early Christian artists. Fifteenth century artists attempted to overcome the picture plane rather than develop it as was done during the sixteenth century. That is, while movements into depth were often attempted by placing forms behind one another and by the use of perspective, the relation between the foreground and background was not always clear: the foreground, for example, was organized in very shallow depth, while the background formed a very exaggerated depth, as in the *Crucifixion* by the Master of the Augsburg Visitation, figure 8. During the later part of the fifteenth century and the early part of the sixteenth century, this discrepancy between foreground and background was overcome first by organizing forms into a diagonal direction, as in the *Mourning for the Body of Christ* (C. 1460) by the Northern French School, figure 9, and then by organizing the space into strata parallel to the surface of the canvas, as in the painting of *The Annunciation* by Roger van der Weyden, figure 44, and of *St. Luke Painting the Virgin,* figure 10. These methods were used to

organize three-dimensional space in a painting, to relate the near and distant, and to bring them into relationship with the surface of the canvas. While Masaccio was one of the first of the Italian fifteenth century artists to break with the dominant role given to the picture plane in the organization of the third dimension, it was not until the next century that the artist developed the picture plane.

SIXTEENTH CENTURY:

That is, while the sixteenth century artist used planes parallel to the surface of the canvas, he did so with greater freedom. The plane structure became less obvious and was felt rather than seen. It was skilfully made to support the subject matter of the composition rather than to dominate it. Forms were interspersed more freely within the third dimension. There was a greater rhythmic design between the figures and bold patterning with chiaroscuro areas. All of these factors aided in bringing the background and foreground into greater designed harmony.

Another aspect of the space organization of the sixteenth-century artist, now more fully in control of his medium, was the organization of the forms in the picture nearest the spectator to create an imaginary frontal plane, as in *Athlete* by Michelangelo, figure 11. While the grouping of figures into a plane parallel to the picture plane, or the creation of an imaginary frontal plane is reminiscent of the fifteenth century, it did not mean the continuation of a primitive type of organization, but a new concept of spatial organization done with full control of the medium and as a matter of free choice. The recessive movements, in other words, were not permitted to dominate the picture, to emphasize a perceptual perspective space only, but were

strongly designed in favor of an architectonic emphasis on the surface.

The entire change in style from the fifteenth to the sixteenth century was due not merely to the change in the compositions and the types of forms used, but in the change in man himself. The ideal of beauty was no longer the thin figures of the fifteenth century as in the *Crucifixion* by the Master of the Augsburg Visitation, figure 8, but well-rounded monumental forms, as in Michelangelo's *Athlete,* from the Sistine Chapel, figure 11. The daintiness of the early fifteenth century was replaced by energetic and powerful figures. The portrayal of tension and complicated, nervous movements of the figures was replaced by aristocratic and relaxed figures which move easily and freely, as do the lines of the composition.

In the sixteenth century, figures or scenes were manipulated to stress the artist's own feelings and ideas as imaginative interpreters of the subject matter. Expressional design became more the master than servant of the traditional design.

As the medieval faith weakened and man became more the master of his environment, a spirit of the dignity of man entered his work. The art of the sixteenth century, of Leonardo and Michelangelo, became more and more a figure art. The artist was interested in articulation of the human figure itself, and he did not hesitate to show it nude. Guided by classical art and masters of representation and spatial organization, art of the sixteenth century was strongly designed and monumental in effect. There is a grandiose exuberant feeling about work of this period as illustrated in the work of Michelangelo. Christ, for example,

is no longer painted as a humble teacher as in the fifteenth century; he becomes a leader among men.

Only important events were painted, and incidental scenes were left out. The reality of the story that so concerned the artist of the fifteenth century gave way to an idealized conception of a scene; a biblical story, for example, was no longer placed in the type of locale in which it occurred, but was placed in a new and very desirable environment. There was increased emotional intensity within the picture, a greater sense of dynamic movement. The principle of contrast was consistently exploited as a design principle in painting, for the first time. This principle was used not only in the structure, as when the vertical was set against the curve, but especially in the subject matter, when contrasting emotions in the same picture were expressed by the gestures of the figures.

The paintings of the sixteenth century, in contrast to those of the fifteenth century, not only have vertical and horizontal directions in their pictures, but they dominate the picture; and as pure oppositions of direction became emphasized, pure oppositions of color not commonly used in the fifteenth century were used.

In observing the changes in the art of the past, one might well ask whether the different ways of perceiving were determined by the individual's inner development or by outward stimuli? Actually the development of art history does not evolve very differently from the development of the individual personality in relation to social groups within a culture. Inner process and environmental stimuli are mutually interdependent. Given a favorable environment for human growth, creative search will result in different ways of seeing, feeling and evaluating the world.

The psychic energy of a period has a marked influence on the types of forms and images used. Fundamental to the activity of man is the release of tensions which are caused by personal and social problems. This process includes disturbance of established equilibriums, readjustment of the individual, changes in physical conditions, varying demands of the social world, and other disturbances. There is alternation between unbalance and balance in the living and adjusting processes of the individual. One means of releasing this psychic energy is through art; and because the art process stems so deeply from the unconscious, man can express his innermost tensions automatically. This release of energy need not be compulsive in character; the artist does not necessarily have to get rid of feelings; his work can be automatic and dream-like. He is still, nevertheless, releasing inner tensions. The organismic psychologists, especially Kurt Lewin (see his *A Dynamic Theory of Personality,* 1935, McGraw-Hill Book Co., and *Principles of Topological Psychology,* 1936, McGraw-Hill Book Co.), speak extensively of inner tension systems of energy, resulting from the needs of the individual, as the cause of behavior. This is different from the neural connectivists', or mechanistic psychologists' explanation of human behavior mainly in terms of the conditioned-reflex, of the addition of one conditioned response onto another. Fundamental to the organismic or Gestalt psychology is the oneness of the human act, of gaining insight into a situation, in closing a configuration and thereby organizing new wholes.

Gestalt is defined by George W. Hartman in *Gestalt Psychology* as ". . . the theory that all mental experience comes organized in the form of structures which, when

relatively incomplete, possess an immanent tendency toward their own completion. It rejects the assumption that isolated local determination of psychic processes ever occurs and maintains that all organic and inorganic stresses tend toward an end—the state of equilibrium. In its broadest sense, the doctrine of Gestalt is a philosophy of nature and holds for all the sciences and not just for psychology. The external universe, life, and mind are composed of Gestalten." (The Ronald Press Co. 1935.)

A parallel can be drawn between these two psychologies, organismic and mechanistic, and art. These psychologies point up the difference between an art that is expressive of the whole man and his relation to the culture of his times; and an art that is based on one conditioned response after another, one learned act added to another, which is not as free as the tapping of natural and deeper sources of energy, felt and thought within man himself. Intuition is ignored in favor of the scientific method, of that which can be tested and categorized.

Interpretations of the nature of psychic tension are determined by the creative effect of the artist's work as a whole, as well as some knowledge of the period during which he worked. The character of the painting design of a period often seems to reflect the strength or decadence of that period.

When the artist felt restricted or inhibited by social institutions, he expressed such energies. The use of sharp angular forms, tenuous human figures, emphasis on the isolated object rather than on an overall, integrated design, were characteristics reflecting the psychic tension of the fourteenth and fifteenth century Renaissance period.

The organization of three-dimensional space in archi-

tectonic relationship to the picture plane is in sharp contrast with the almost complete dependence on the curve and perceptual recession of space of painters in later centuries. The psychic tension of a period is expressed not only through the design of the painting as a whole but through the scenes portrayed and the way the subject matter is painted. Hieronymus Bosch's work shows tight expression, thin forms and sharp, crisp outlines; he painted weird, imaginative pictures with fantastic forms, as illustrated by a detail from his painting *Temptation of St. Anthony,* figure 13. Compare this expression with the forms used by Rembrandt, figure 38. These are well-modeled and full, and loosely combined by an overall light-and-dark atmosphere. Or compare Bosch's representation of the human form with that of Rubens, whose figures are well proportioned and sensuous. In the work of Rubens contrasting types of scenes were painted: conventional portraits and acceptable church scenes were portrayed in some paintings at the same time that heroic, and what often appears to be wish-fulfilling, scenes of unconventional romanticism, were shown in other pictures. In comparing these works with twentieth century painting, Pablo Picasso's *Crucifixion,* figure 14, for example, a different expression of psychic and emotional tensions is noted. Realistic forms are re-interpreted in new symbols of expression.

SEVENTEENTH CENTURY:

While in the sixteenth century the horizontal and vertical were emphasized as a main direction, painting in the seventeenth century emphasized the diagonal and curve. While in sixteenth century paintings forms were placed spatially in strong and often parallel relationships to the surface of the canvas, the seventeenth century artist gradu-

ally began to emphasize a recessional space. This abandonment of a formalized planear organization of the third dimension for one in which forms are more freely distributed in space, is exemplified in Pieter Bruegel's *The Wedding Dance*, figure 12. Three-dimensional space itself is emphasized. Vermeer and later painters still more clearly illustrate this realistic space emphasis. One can notice the weakening of the structural organization of the painting in favor of perceptual vision when, for example, we compare the articulation of space in the work of Dürer with that of Vermeer. If we compare the work of some of the painters of the seventeenth century with that of the fifteenth century the difference becomes even more apparent. The emphasis shifts from the principle of the combination of objects in a plane, parallel to or at an angle to the picture plane, in the fifteenth century, to the elimination of this plane in favor of receding movement, with the stress on the space existing between the close and distant, in the seventeenth century.

The seventeenth century at its best was marked by highly vital art works and at its worst by an over-abundant use of decorative forms. The work of three leading painters of the seventeenth century, El Greco (1541-1614 A.D.), Peter Paul Rubens (1577-1640 A.D.), Rembrandt van Rijn (1606-1669 A.D.), exemplifies some of the changes in the design and space organization following the sixteenth century.

In the work of Rembrandt, receding space became partly subordinated to a reemphasized picture plane. This emphasis was achieved by a free play of light and dark over the whole canvas, rather than by the earlier architectonic organization of space. The individual object became subor-

dinate to this light-and-dark pattern. Its exact contour became lost in a fusion of the modeling of the form with the darkness in the background. Concurrent with this imaginative use of light and dark, Rembrandt freely and emotionally organized forms in space, maintaining, nevertheless, a spatial equilibrium and the two-dimensionality of his picture.

While also using a free pattern of light and dark in his painting, and manipulating spatial planes freely and more decoratively, Rubens began to intertwine background with foreground forms, thereby creating an imaginative yet consciously conceived relationship between the two, avoiding emphasis on either perceptual vision or strictly formalized organization of space attempting to relate and unify by still another means the background and foreground. The complete and free interpenetration of background and foreground, freed of naturalistic perceptual experiencing, advanced much farther in modern painting.

Rubens at the same time emphasized the curve and diagonal in his work, a characteristic of the Baroque period. How strongly the curve and diagonal substituted in the seventeenth century for the vertical and horizontal in the sixteenth can be observed in comparing the work of Rubens and Dürer.

It is in the work of El Greco that the Baroque art reached new heights. His work is marked by emotional intensity and the integration of spatial and linear elements which help further to heighten and crystallize the contribution the Renaissance had made. He manipulated his forms and compositions freely, yet created strong diagonal and curved, vertical and horizontal surface movements within which the foreground and background were strongly held.

While he used the curve and diagonal profusely, the vertical and horizontal as well were beautifully and expressively designed, creating an innate expressive strength. He developed a strongly constructed, highly emotional and imaginative spatial organization using strong intensities of contrasting color, distorted form and designed light and dark areas to help carry out the intensity of his imagined concepts.

Searching for the keys to artistic strength forgotten in the decorative excesses of the seventeenth century Baroque, the neoclassical French artist attempted to revitalize the ideals of the classic art of the past.

EIGHTEENTH CENTURY:

The work of Nicolas Poussin (1594-1665 A.D.) who lived most of his life in Italy, a precursor, and Jacques Louis David (1748-1825 A.D.) and Jean Auguste Dominique Ingres (1780-1867 A.D.) exemplify the best in neoclassical art. The classical severity of their work is in sharp contrast with that of such a painter as Antoine Watteau (1684-1721), who expressed the frivolity, gayety and extravagance of the French court of that period. In the work of Poussin, there is an emphasis on the horizontal and vertical structure, the reiteration of the frontal plane, the subordination of the literal story to the design of the whole. The severity of David's work and the classical simplicity of the linear design of Ingres were well received by a people tired of the abuse, laxity and excesses of the French court.

With the French Revolution and liberation new art forms developed to express the newly released energies and tumultuous feelings of the times. The nineteenth century ro-

mantic school followed the neoclassicists. The romantic painter Eugene Delacroix (1798-1863), found his ideal in the historical subject and expressed his longings in the dramatic, exotic episodes of the past, revealing through them his own passions and imaginings. Vivid hues, vigorously moving areas of light and dark are characteristic of his work. The interest in light and color was due in part to the influence of the English landscape painters, John Constable (1776-1837) and Joseph Turner (1775-1851), whose direct contact with nature produced new qualities of vibrant light and poetic expressions in painting. They contributed new techniques such as using heavy brush strokes and dots of pigment, rejecting the gray, black, and brown shadows of the earlier painters for greater color intensity.

NINETEENTH CENTURY:

New freedoms on the lips of the people of the nineteenth century—liberty, equality, fraternity—were encouraging new expressions in art. Scientific attitudes began to dominate intellectual activity of this century, and scientific discoveries and mechanical inventions speeded social, economic and political changes. Art became more and more subject to imagination, sensation, feeling, and finally to scientific investigation. Romanticism, impressionism, pointillism, post-impressionism, cubism, and abstraction followed, reflecting these changes in the life and thinking of the people of the nineteenth and twentieth centuries.

While the romanticist, Delacroix used the curve and diagonal along with the free arbitrary distribution of light and dark over the surface of the canvas, he introduced at the same time a new note of realism into his work. No

longer did he paint goddesses, but human beings. And later Auguste Rodin (1840-1917), the sculptor, portrayed the everyday man, showing him subject to human emotion, poverty and toil. (Rodin worked with perforated space in his sculpture, bringing into play a new idea of form and light, typical of some later interpretations of the role of space and light in two-and three-dimensional work.)

The important painters of the nineteenth century drew their inspiration from the landscape. The artist turned to the world about him for his subject matter and inspiration. It was not a world which formed a stage for sacred themes, but one to be looked at and studied for itself. While Théodore Rousseau (1812-1867) painted the heroic grandeur of nature, Jean Baptiste Camille Corot (1796-1875) portrayed it lyrically and Jean François Millet (1814-1875) chose the outdoors as the setting for the rugged French peasant he used for his subject matter. These "men of 1830" gave impetus to the school of naturalism which followed. While the majority of French painters of the times followed the dictates of the Academy, which limited subject matter to traditional, narrative and religious themes, painters such as Edouard Manet (1832-1883), Honoré Daumier (1808-1879), Claude Monet (1840-1926), Camille Pissarro (1830-1903), Alfred Sisley (1840-1899), and Auguste Renoir (1841-1919) turned to the outdoors and developed new painting techniques. While Manet painted everyday views of scenes with people and objects in motion, the world of leisure and Sunday promenades, the bull fight, a horse race, a girl tending a bar, a nude woman leisurely sitting out of doors in the company of two fully dressed Parisian gentlemen, Daumier commented satirically on the times in his cartoons and paintings.

Edgar Degas also showed scenes taken directly from life. Ballet dancers were shown practicing and women bathing in tubs. A new spatial feeling was introduced in the work of Degas through the use of a bird's-eye view of a scene. It was not a big jump from here to the work of the impressionists, who depicted the world in terms of an optical analysis of light and of immediate impressions.

Impressionism, the work of Sisley, Pissaro, Monet and Renoir was founded on the principle of the reproduction of nature through color. Scientific color theories were applied to painting. Outlines of forms did not exist for the impressionists, since visual nature existed only through light. They worked with form and light through complementary color, used in small dabs on a canvas, fusing in the eye of the spectator at a distance.

The impressionists' technique of exploiting color and pigment texture and emphasizing the flat nature of the picture plane was more strongly combined with design in the work of Georges Seurat as illustrated in *The Side Show*, figure 7. He used color in smaller dabs than the impressionists and applied it more systematically, using complementary color in closely adjacent spots, creating an even greater luminosity in his work.

This emphasis on the two-dimensional nature of the picture plane by the impressionists was re-echoed by Paul Gauguin who insisted on "truth to the surface," creating his paintings with large flat rhythmic masses of intense color.

CHAPTER FIVE

Art Today

THE DEVELOPMENT of impressionism, post-impressionism, cubism and the many schools that followed, is closely associated with the changes in society.

With the industrial revolution, the growth of cities, new developments in psychology and in the social and physical sciences, and with the changes in the ethics, emotional securities and aspirations of mankind since the middle of the nineteenth century, man and his art products changed radically. There were the technological advances from handicrafts to mass production and the resulting depersonalization of the individual in a machine world: the gearing of the social and economic structure of society to technology; the development of new sources of power and prestige with the growth of new economic classes in society;

the new ethics of individualism and freedom to exploit without hindrance; the new knowledge of the semi-autonomous nature of the subconscious in man, of the concepts of repression, conflict, insecurity, in the depth psychology of Freud; the space-time theory of relativity of Einstein—these and many more influences formed the springboard for the art of today. The world and its meanings for man changed.

And today changes are still proceeding at a fast tempo. There is no dominant unifying principle in contemporary culture as there was in previous periods of history. This is a period of exploration, of ideological conflicts, of rapid emotional and psychical evolution.

Art has ranged in the twentieth century from machine-like motifs in painting to cathartic and psychological expressions, from expressionistic social realism in painting to complete non-objectivism, from material, constructional and form investigations to psychic explorations. Man's painting reflects the vital, exploratory, restless, reflective reinterpretation of his own meaning in the world. It is a world which, while seeming to be terribly chaotic, contains tremendous constructive and integrative forces. With the growth of democratic freedoms have come new and greater personal and social obligations and responsibilities—and greater possibilities for realization and development of positive, creative, personal experiences.

The ethics of the artist can be a positive force in the solution of today's problems. Each person who makes a sincere effort toward self understanding and social understanding, works as a creative "artist." Such a person is constantly questioning, searching. Individual growth is a social process, in the widest sense. The painter who works in a

modern idiom does so because he is searching for an integration of forces as they relate to painting, and in a larger sense, through them, with the forces of nature. He stands morally for an uncompromising attitude of honesty in his work, even though his painting be misunderstood. The artist's attitude helps to shape the ethics of society. And because he works intuitively he interprets and expresses his times in a manner often only vaguely felt by others. He foreshadows the future by showing us the forces at work today about which we may not be aware. While the meaning of his work may not be at first clear, it will be if we seek to understand his language. In a broad sense he brings to consciousness the meaning of many subconscious forces at work in all of us. The artist's contribution is positive for his work is integrative: consciousness and subconsciousness are fused to bring clarity out of confusion, to bring meaning where only the unknown stood before. And he does this while creating symbols and values beyond the literal, that can live as profound experiences for the spectator.

While the psychology and sociology of man changed, influencing the forms of expression of late nineteenth and twentieth century art, mechanical inventions also had their effect, especially the camera, for it usurped some of the representational function of art. At first photographs were made to look like paintings and, except for brief periods, photography was not exploited for its own potentialities until the turn of the century. Its representational and creative possibilities also then became more evident. With the camera came new concepts and representations of space, light and movement: the bird's-eye view and frog's-eye view, simultaneous and overlapped images, montage, trans-

parency. Aided by the camera, the artist was helped to free himself of the dominance of the object and began to express his times in new ways, reinterpreted through his own enlarged world of new concepts, freedoms, conflicts and aspirations.

EXPRESSIONISM:

To highlight the changes that formed the background for present-day painting, let us return to the school of expressionism which preceded the school of abstraction. Odillon Redon (1840-1916) probed into the world of the subconscious and wrote that the reality he wished to express was in his mind's eye. Redon sought the answer to art within his inner imagery. Vincent van Gogh (1853-1890) in his reaction to everyday scenes, translated what he saw in terms of a subjective emotion expressed in highly individual interpretations of the world. Color, texture, design relations were intensely personal. Paul Gauguin (1848-1903), working at the same time, emphasized intense color relations and the flat nature of his canvas. Henri Matisse (born 1869) became even freer in the use of masses and colors. He reaffirmed the importance of the individual's own feelings, gradually departing from subject matter and emphasizing line and color. And Wassily Kandinsky (1866-1944), one of the first painters in the twentieth century to leave subject matter out of his pictures entirely, worked lyrically and intensely in creating a personal expression of lines, colors and textures, contributing significantly to the schools of art that followed. The artist began to value his own personal and non-representational expression for itself. Forms and colors were put into pictures as the painter's feelings demanded, even though these forms were not

found in the scenes painted. Redon, Ensor, Van Gogh, Gauguin, Renoir, Matisse and Kandinsky each in his own way contributed to the freeing of emotional and individual expression.

POST IMPRESSIONISM:

Paul Cézanne (1839-1906), figures 1, 18, 20, 29, 34, was first an impressionist. However, he found his pictures lacked compositional strength and proceeded to a more profound analysis of the creative experience in painting. While the impressionists worked in terms of personal emotional experience and of a return to nature, Cézanne succeeded in fusing, developing and intensifying these ideas. He searched for the heart of the creative act in painting. While impressionism stressed the surface of the canvas and sought to produce an effect of light and space, Cézanne succeeded in creating without using a formula. Cézanne's figures are stiff, his forms and outlines broken, and his perspective faulty—but these are only outward aspects of his creative discoveries. He was more interested in the problems of creative form than in those of representational form.

At the beginning of the twentieth century, art forms departed radically from those of the past and many new schools were started.

DADAISM:

The early Dadaïsts expressed the dynamics of the modern age directly, by violently dismembering natural objects, creating new images and sensations and expressing the new age of sound, noise, automobiles and radios.

At the same time futurism in Italy issued manifestos concerning the dynamics of movement and portrayed the

new age by showing several positions of an object simultaneously. The rayonists, too, tried to express movement through whirling circular areas of flat color, as one might visualize a landscape from a moving airplane. Constructivism expressed the dynamics of the new era through the use of new materials—glass, metal, plastic—combined in constructions to exploit their visual and structural potentials. At the same time there was the rejection of the objective world in painting by the suprematists, who asserted their independence and search for a new and absolute aesthetic form by doing such things as painting a black or white square on a white background. Piet Mondrian carried this farther, clarifying and distilling the emotional and structural content of painting, and re-emphasizing the essential nature of the picture plane and the intrinsic potentials of pure form and color, using only yellow, red, blue, white rectangles, based on vertical and horizontal black lines of varying thickness. In clarifying fundamental ideas he directly limited the form of his personal expression. "Although I was thoroughly conscious that we can never be absolutely 'objective,' I felt that one can become less and less subjective, until the subjective no longer predominates in one's work." (Piet Mondrian in *Plastic Art and Pure Plastic Art.*)

In all of these developments there was a search for essentials. Movement, design, collages, the use of material and textures, emphasis on the two-dimensional picture plane, a new understanding of equilibrium and color, were employed and exploited.

Paralleling these art movements, and interacting with them, was the work of Pablo Picasso (born 1881) as well as Georges Braque (born 1881), Juan Gris, Joan Miro, Marc

Chagall, Paul Klee, to mention only a few. By closely following the development of Picasso's art forms, through the breaking down of realistic objects to the emotionally integrated lines, planes, colors and textures we are confronted by abstract art. At first Picasso worked with subject matter, both realistically and impressionistically. Soon afterwards he introduced a type of sympathetic social comment into his work. His impressionistic work represented street scenes, dance halls and flower still-lifes.

Strongly influenced by the expressionistic work of the Fauves, of whom Matisse was the leader, and first by Iberian sculpture and then by the direct, primitive, authentic, expression of the African Negro sculpture, Picasso began to paint his subject matter in strong, simple forms and then to dismember it into numerous and violently contrasted shapes.

CUBISM:

The work that followed was the first stage of cubism—analytic cubism, dating from 1909 to 1911. This work was first characterized by the breaking up of forms and recognizable objects into planes, freely placed in space. The object was first broken into planes, in a process of creative investigation, experimentation and analysis. The space representation, while atmospheric because of the fading off of one side of a plane into indefinable darkness in the background, was not based on conventional optical systems. The rejection of perspective as a means of producing space, begun by Cézanne—not merely for the purpose of showing more than one view of an object or scene in order to give a simultaneous view of it from several positions, or merely to raise or lower the optical point of view of the spectator

as he views the painting, but in order to create a free space organization—is carried forward in cubism. The background of the painting fuses with planes in the foreground. There is breaking up of forms into many planes, and prismatic, atmospheric and textural effects in these early cubist paintings. The use of color is subordinated to the investigation of the form and space problem, and brown, black and gray are predominantly used, figure 36.

Picasso broke up his forms to analyze spatial movements and their organization as elements in themselves. Subject matter was used as a means to understand the relation of three-dimensional space and perceptual form to the two-dimensional flat surface. In seeking the roots of creative experience in painting, Picasso began to eliminate realistic space and rejected preconceived systems of design.

Cubism gradually rejected subject matter for the expression of design itself through the use of rectangular planes and chiaroscuro in space. As Picasso's work developed he used fewer line planes and simpler, more strongly patterned designs. Planes became clearly defined; chiaroscuro was slowly eliminated; there was a re-introduction of objects; texture was emphasized. This took Picasso into that period of his art called synthetic cubism, 1912-1921. As Picasso found the answers to his creative searchings, he was able to control his medium more easily. Instead of dissecting the object, he now better understood its relationship to the creative needs of his medium and he was able to work more freely according to his new understanding. Three-dimensional space constructions, the use of texture and clear color areas instead of modulated tone, and a more marked control of the design over the entire canvas, typify this period, figures 5 and 17.

Picasso said: "When we invented cubism we had no intention whatever of inventing cubism. We wanted simply to express what was in us." Since a painting is dependent upon its abstract structure, the artist may wish to work only with this structure. If the artist finds that realistic representations are extraneous or limit his creative development, he may change or discard them. This does not mean that the modern artist is unable to use realism (the superb realistic work of Picasso, for example, easily documents this), but rather that he often chooses not to use it.

SURREALISM:

Surrealism had its early roots in the work of the Dadaïsts. It may be defined as the combination of irrational images or subjects not ordinarily associated. The sources of its imagery are dreams, uncensored imagery, imagination and other psychical phenomena. The surrealist stresses the difference between the inner world of imagery and the outer world of perception. He sees with his inner eye, and attempts to project many of the images that occur.

In order to express that complex unconscious world, the surrealist encourages the development and projection of the imagery in it. Compulsions, wishes and hopes buried deep in one's mind are translated into pictorial images. Such things as the dissociation of mind from body, projection of the body-image, former experiences, those that are related as well as those that are chaotic, self-destruction, sex impulses, influence the surrealist's work. These kinds of imagery are in some measure familiar to everyone, even if only in dreams. The fact that man does not thoroughly understand himself and the functioning of his mind—that he lives partly in a dream-like unconscious world—gives valid-

ity to the surrealist's expression. But the expression must be substantially related to conscious creative experience and not become a substitute for the reality of it. Salvadore Dali fails to accomplish this, but Joan Miro, Paul Klee, Marc Chagall and Pablo Picasso, in the surrealist phases of their work, do.

The surrealist artist seeks to include psychological factors which have existence in his creative experience. He is dealing with psychological sources of artistic expression. The creative artist does not copy his dreams, but uses them because he realizes that dreams reflect the inner working of man's mind, and these influence creative art work.

The exact psychological nature of that creative process is only slowly being uncovered. Automatism and surrealism seek to help this revelation.

Some of the more recent forms of art, in attempting to delve into the primary sources of the mind, produce something akin to the magical work of the primitive. It is called magical because it stems in a conscious way from those instinctive, symbolic and conceptual methods of drawing so characteristic of early and primitive man. But it is not the art of the primitive or the child, because it is arrived at through a conscious, mature and deliberate realization of aims.

AUTOMATISM:

All creative painting has some elements of automatic projection of forms and colors, for the expression of the artist results through *his* way of putting the picture elements of form and color together. But while automatic expression is closely associated with surrealism, it is not surrealism, except in the very broadest sense, even though its unconscious

sources in the form of images are included along with its projection. Automatism is a type of drawing governed by involuntary action. Such self-acting impulses occur most frequently when the individual is relaxed. The impulse to place lines, forms and colors on the canvas, as well as images, is quite spontaneous while the artist is working. And while there may be an irrational combination of images, there is hardly the deliberate and compulsive combining of images so much more characteristic of the surrealist movement. A relaxed way of working, conducive often to the free flow of autonomous impulses in lines, forms, colors and movements on a canvas, can be compared to the free flow of dream-like images that sometimes pass through an individual's mind when he is at ease with the world and himself. The imagery content of an automatic work is not the primary aim of the artist, as it is to a larger degree the aim of the surrealist, but rather a very free imaginative expression.

"Automatic" does not necessarily imply license, for automatic impulse can be combined with body-felt movements and design ideas while the artist is working. The impulse can be delayed or held in suspension, or the expression on the canvas of automatic impulses can later be organized within the nature, spirit and quality of a free expression, once it is projected. Actually an interaction and a fusion of both processes occurs when the artist is working, figure 50.

Automatic work does not mean scribbling, nor necessarily only doodling, though it has much in common with the doodle, but rather the cultivation of automatic impulse that often occurs as a tangential, free association, uncontrolled impulse when something else is being thought of. The automatic act is neither primarily a defensive, compen-

sating or escapist act, nor is it a habit or problem-solving act.

Automatic impulses fused with various degrees of designed control and imagined concepts, and with various types of imagery—African, Indian, Mayan and others—as well as with the individual artist's own imaginary world, can help produce a unique and very personal expression.

The exact opposite of automatism is photographic representation, where the relationship of lines and forms is not determined by the inner world of man, but by a physical world of gravity and atomic structure. In the world of art it is neither gravity nor atoms that makes painting significant. It is the world of feelings, body movements and ideas interacting with a two-dimensional surface.

By attempting to free himself of those elements interfering with the flow of his expression, the artist seeks to reach ever deeper levels of his creative experience. Man searches to understand and thereby free himself. In art his searches never cease, for creative work means a struggle, both within one's heart and mind and in the medium of expression.

The expressive act is influenced by the type of medium, by the way the paint is applied and by the direction and texture of brush strokes; it can exploit a rather natural and arbitrary distribution of paint on the canvas. This type of painting is referred to as "accident" in art: spattering and chance running of paint are deliberately produced, and the resulting forms are developed in character with these "accidents." There is also that type of painting in which shapes found in nature, such as roots, leaves, veins in the human body, even biomorphic shapes found in weather maps, are exploited and compositionally developed. These methods attempt to utilize the forces and shapes which appear close

to the rhythmic source of nature. The utilization of strange imagery and textures and shapes suggests attempts at reaching new emotional and psychological sources. In another type of painting the artist imagines himself within the picture itself, painting it from all directions, toward the front of the canvas as well as into depth. New feelings are experienced and projected into the picture.

The modern artist, realizing that he is dealing with the essentials of the creative act, burrowing, as it were, to the roots of his creative process and its meanings, desires also to utilize psychological and physiological processes, not as the psychiatrist does for an analysis and development of personality, but only as the psychological is an integral part of the creative processes. It is his aim to exploit all the ramifications of the creative process for the purpose of art, including responses not only to nature, but to his dreams, fantasies and images, even reorientating his own ideas, feeling and body responses toward himself. This is not escapism. It is reality.

Changes in the painting of the past illustrate the various ways in which man has reacted to the world. Collective evaluations of the artists of a period become the conventions of that period. In the past some of these conventions have been based on perceptual vision. Today the artist is developing new meanings and new relationships between himself and the world freed of such dependency.

Art is made up of signs or symbols, for it is through them that man can communicate his ideas and feelings. Our meanings are based on the interpretation of signs and this interpretation, combined with past experience, forms our reactions. These signs may stand for an object, abstract ideas, a past experience, or for feelings, since the way forms

relate on a canvas are signs evoking feelings communicated by the artist. The work of art considered as an integral whole, itself becomes a symbol for the times in which it is created.

Modern art is not primarily intellectual, as some think, but exploration and crystallization of the intuitive expression.

Each artist has something unique to say which is determined by the way he understands and experiences life. El Greco's passions were deeply excited by religious ideas; Paul Klee, by a personal, introspective, imaginative, dream-like world; Picasso, by the meaning of form, use of symbolism and by explorations into art expression.

Although Mondrian seems to have reached certain conclusions as to the use of the vertical and horizontal in art, and his painting is important for its original contribution, his work no more marks the limits to creative work in painting than Seurat's contributions and conclusions mark the last word in painting in his day. A young painter must make his own creative contribution and cannot merely substitute an experiencing of knowledge for the experiencing of life.

We cannot agree with those who believe art today has reached a stage beyond which it cannot progress and that the time is fast approaching when it will no longer have a function in society.

Self-expression is one of man's fundamental needs, and even a Utopian society will not eliminate the need for a very personal expression, merely because a cooperative social attitude is substituted for an individualistic one.

Though today the modern artist is freed of subject matter limitations, of social and spiritual taboos, and though he has at his finger tips the representational discoveries of pre-

vious centuries, he has consciously and deliberately rejected many of the previous conventions, distorting, reinterpreting and reconstructing what he sees in nature. It has taken man many centuries to develop representational skills, yet today's artist disregards many of these findings.

The spatial concept of the modern artist is in variance with space ideas of the past. No longer is the artist tied to a fixed optic system for representing space. With the passing of the need to express himself through realistic representation, one- and two-point linear perspective as the basis of representing and organizing space in a canvas was abandoned. Instead space is freely organized in the canvas as the artist wishes. He is free to intersperse background planes with those in the foreground, creating the most imaginative spatial structures. New spatial effects, such as transparency, juxtaposition of line and texture planes, interpenetration of planes, and organic interlocking of planes where one flows out of the other, at one point overlapping it, and at another receding behind it, have been developed. The space has become more fluid in its organization, and in many ways a more direct vehicle for the communication of the artist's spontaneous impulses: he does not have to reinterpret them through a perceptual representation of space but can carry out ideas and feelings or relations of movements and forces more closely tied up with the two-dimensional character of his picture surface, and with the feelings, ideas, and ways of working which are most conducive to his own expression.

The art forms of the past and those of today are not absolute; they are not final. The greatness of the individual works of a past period was due, not to the absolute way in which the artist saw life, but to the way he transformed

life into a medium, whether sculptural, architectural or graphic.

Modern art, therefore, is not merely the exercise of geometry or the clever projection of fantasy or imagination, with the artist's tongue in his cheek. (The word modern is perhaps a poor one to use in referring to contemporary art. What we are talking about is not a new art, for Van Gogh was "modern" when he painted, but rather an art form which is contemporary. Present forms of art will give way to new forms as the artist's creative need requires and a new "modern" art will develop.) Modern art is as much a part of our times as Titian's work was a part of his, or as Duccio's a part of his.

To enrich our understanding of art we must examine not only the obvious, the composition or subject matter, but we must ferret out the emotional content, rather than being satisfied with looking at merely the outward forms clothing this content. We can sometimes find valuable clues in the artist's ideas, discovering through them and our own creative searches something of the ideas and emotional content communicated by the picture. We shall try to do this in the succeeding chapters.

CHAPTER SIX

Beyond Appearance: A Visual Vocabulary

WE HAVE COME to associate three-dimensional form and space so thoroughly with our visual experience of the world that we assume that the same visual experience is basic to painting. We often think that form in painting is based on three-dimensional representation. This is not true; the representation of space and three-dimensional form on canvas is illusory; visual orientation is learned. In painting we do not deal primarily with illusions if we wish to work as creatively as possible, nor do we deal primarily with learned adjustments if we wish to work with the primary sources of creative experience. The human mind very early learns to translate automatically into three dimensions what the optic

nerve sees. In painting we are dealing with a two-dimensional surface; a different visual, kinetic and tactile relationship than that in nature has to be considered. The role of three-dimensional space in a picture therefore needs to be re-interpreted.

It is important in discussing painting to deal with vision *as it is related to painting* and to make a distinction between what we actually see and what we have learned to see. In doing so we can begin to rid ourselves of some of the ingrained habits of visual orientation and their concomitant attitudes that prevent our seeing a natural expression on a flat surface. Rather than the surface aspects of things, inner forces will be revealed. A reorientation will aid us in understanding some of these phases of painting which at first seem strange and novel.

Seeing in nature takes place through stereoscopic vision, focusing of the lens of the eye, convergence of the eyes, and kinesthetic factors that do not function in painting. Stereoscopic vision is the receiving of two slightly different images of the same object through each eye and the combining of them into one by the spectator. When a stereoscope is used, two separate photographs of the same scene, each taken a slight distance apart, are combined into one image by the viewer; this produces a three-dimensional effect. If we compare each separate image we receive of an object by covering one eye each time, we will note the difference between the images. Yet when we look at the object with both eyes, we are not aware of the different images. This combining of images helps us to realize space visually and to see three-dimensional objects in nature. The process of focusing our eyes also helps. The comparing of a close object to a far one, makes the lenses in the eyes change thickness.

As we compare a close object with a far one, we are helped in seeing the space that exists between them. Unfocused objects which enter the field of vision when our eyes are focused on a particular form in space aid us, also, in realizing spatial distance, for the unfocused image informs the individual that close and far objects exist relative to the selected form. (Photographers have made special use of this fact, often deliberately placing objects in the foreground which will appear unfocused in the photograph.) Also helpful are factors involving movement: the fact that we converge our eyes when looking at a close object, as compared with a far one; bodily movement, which helps us through the viewing of an object at different angles; and the comparison of close surfaces with distant ones through the juxtaposition and movement of one against the other as we ourselves move. Three-dimensional forms and depth have become synonymous with the viewing of the physical world.

Form in a picture, when interpreted to mean something solid, is represented through modeling and perspective. In a drawing of a bottle, the addition of shading, for example, immediately renders this form three-dimensional to the casual observer. But to the artist who is concerned with a different and larger interpretation of form (that of the force and energy behind appearance) such an addition does not produce form except in appearance; and modern painting has shown that is not necessary. Experiencing of solid form as something in itself depends upon a perceptual experience often too far removed from its more subordinate role in the world of a two-dimensional surface and its relationship to the creative act.

A canvas is flat. In viewing it, we can no longer *actually experience* three-dimensional form and space as we do in the

actual world. At best what we can see are only representations and illusions of space and form. Nature is three-dimensional, the canvas is two-dimensional. The role of three-dimensional space has therefore been reinterpreted in modern painting. The representation of realistic space, chiaroscuro modeling and perspective, so long considered as the cornerstone of form in painting, has given way to an emphasis on the flatness of the painting canvas.

This does not mean that realistic space is not used. Its function in painting was reevaluated by the cubists; and when its role was understood, its function was re-interpreted and it was re-introduced. Perceptual experience of realistic form was made subordinate to the creative experiencing of those elements of painting which are most essential, direct and profound. This had to do with relationships of elements on the surface of the canvas, with representation of space dependent on these surface relationships. There are many manifestations of the re-interpretation of space in modern painting. For example, elimination of fixed perspectives and chiaroscuro is observed in many painters' works. Transparency, overlapping planes, use of line, flat areas of color are some of the means by which the modern artist emphasizes two-dimensional relationships and the surface of his canvas. As if to point up the difference between the two types of spaces in painting, Picasso in his 1913 picture, figure 15, paints two forms, one realistically and one flatly. Each concept of space is based on felt surface relations. (The nature of felt surface relations is discussed in detail in the next chapter. Merely representing the third dimension produces but does not create pictorial space.) In this painting by Picasso, the effect and quality in each type of space is emphasized. The modeled form is heavy and realistic, a

solid form to be found in the natural world. The other form is not realistic, is more imaginary, with greater emphasis on the lyrical interplay of lines, flat shapes and color; there is direct expression of the artist's feelings and concepts and without the interjection of a realistic, three-dimensional, solid form. Picasso uses both types of space concepts in his paintings, exploiting each for psychological and aesthetic effects. In contrasting these two types of space in his painting, Picasso points to the fact that realistic space as such is not always necessary to the creation of a work of art.

Cézanne distorted the natural laws of converging lines for aesthetic reasons. This was less a matter of attempting to create several views of a scene from slightly different positions than it was a matter of changing a scene to create the spatial organization he wished in his paintings. Cézanne was well aware of the laws of linear perspective, yet he deliberately departed from them. (Linear perspective is the method of producing an appearance of distance by means of converging lines which meet in a vanishing point on a horizontal ground line level with one's eyes.) Regardless of these laws of drawing, the artist's spatial feelings and concepts were in part freed of perceptual laws. This initial step in disregarding perspective was carried further by the painters that followed. Picasso, in some of his paintings reversed the lines of perspective. He has also often used several imaginary ground lines for the vanishing points of various objects in a picture, at the same time subtly destroying the realistic form.

The modern artist does not "change" what he sees because of an inability to draw what he perceives, but because the distortions help him to express what he wants more directly. The modern artist constantly seeks to understand

the essentials of the aesthetic in painting, devoid of unnecessary superficiality, and exploiting at the same time the *nature* of his exploration. In his search, the modern painter goes back to the elemental source of his creative feelings.

It was not until the early Renaissance that the representation of perspective was fully understood and exploited. The great Renaissance painters were able to use this new technique aesthetically: perspective did not interfere with their creative expression. Yet in the hands of many painters who followed, the laws of perspective were used as an end in themselves, and not as a tool for creative expression.

The fact that the essentials of the creative process are not to be found in the methods and techniques of representing form and space can be seen most clearly in the work of children. A child draws and paints what he knows instead of what he sees. He cannot draw correctly by adult standards of perspective. Yet his expression is very creative. Perceptual representation in other words is not basic or absolutely necessary for the creative act to take place. The child's creativity cannot be attributed either entirely to naiveté or his freshness of impression, although these factors are certainly very important. These feelings must take form in a medium. The manipulation of that medium, in other words, is also very significant in understanding his creative work. The child's feeling for color, line and, above all, the placement of masses on the drawing is fundamental (see figures 87-94). While drawing in perspective or three-dimensional form may be lacking in the child's drawing, he does work with space, but with a space that is freely organized and one that is often created with the most direct and essential of the space signs.

The masses in a painting, whatever they may represent

realistically, are considered as surfaces, or planes. A mass of color or of light and dark on the canvas is thought of as a plane. Objects in nature too are defined for us by means of their surfaces. The floor of a room is a plane; as is also the wall; and the surfaces of the furniture are planes. The surfaces of your hand, arm and body are planes. Planes may be any size, any shape. The surface of the canvas is itself a plane defined by four edges. Each separate mass of light or dark, each mass of color placed on it, is a plane, for each represents a surface. Each variation in hue, chroma and value of a mass is a surface, as well as each separately colored brush-stroke.

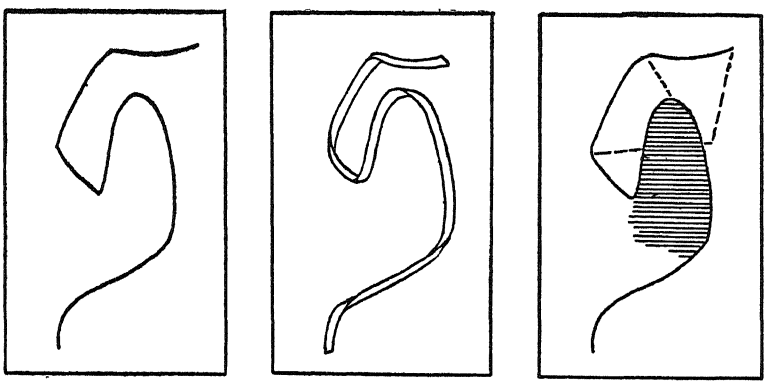
A plane is defined mathematically as a flat surface, a line connecting any two points of which lies entirely within it. In art, however, a plane is considered as any surface, flat or curved, opaque, transparent or imagined, which is delineated by one or more of its edges and which is part of the picture surface, or in a spatial position in depth. Not only does an area of color or value represent a plane, but even single straight or curved lines are considered as planes.

Where lines are used a plane may be fully defined or partially defined. When fully defined, it is bounded by edges on all sides, in which case it is a closed plane. When it is partially defined, one, or more, of its edges is missing, and therefore it is an open shape. Open and closed planes are also made when color or value planes are created, because of the area around the color which the edges of the plane help define; and through combinations of the edges of several different planes, open areas in the canvas can be designed, to give additional open and closed planes.

In art, a plane may be represented by its four edges, by three, or two or one, figures 16, 17, 19, 25, 37. The fewer the

number of edges of the plane shown, the less will be its definition. Three edges do not define a plane as well as four, nor two as well as three. However, a plane defined by only three sides can more easily fuse with the surface and background of the picture than a four-sided plane; and this is even more true in the case of the plane defined by two edges, in which case there is allowance for a free, imaginative space organization. A single line too can be placed anywhere in space in a picture to help articulate the third dimension, functioning thereby as one edge of a plane. When a line is placed on a surface, diagram 10, it may weave in and out of space, diagram 11, at the same time that it divides the surface into various planes or acts as a silhouetted shape, diagram 12. Lines formed by the edges of separate but adjacent color or value planes can act in part independently of the separate planes which help form it, for the combining of several edges creates varied linear and spatial directions.

In nature, of course, lines as such do not exist; edges, yes, but not lines. We see edges in nature because of the difference in color and value between different surfaces. In art,



DIAGRAMS 10, 11, 12

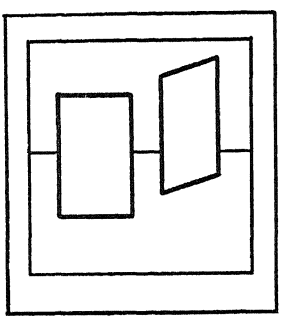
a line can be merely a graphic notation of edges that exist in nature, or it can become something in itself—exploited for its own qualities. What we are concerned with here is that a line can divide a surface so that this surface can take on spatial significance, and that a line itself can intertwine back and forth in space, such as a rope or wire bent back on itself can enclose and define a volume of space. Each change in direction of such a line operates as a new planear direction in space.

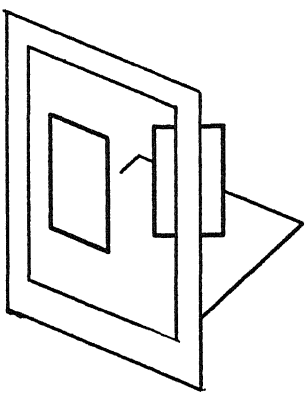
In order that there be a plane, a surface must be created. Two lines placed at an angle to each other can create a surface even though it may be a transparent or imaginary surface, as used in Picasso's *Still Life*, figure 17, or Rembrandt's drawing, *Haman Implores The Grace of Esther.* Such a surface is not filled with color or light and dark, or texture, or is not defined on all four sides, but it nevertheless func-

Rembrandt van Rijn: *Haman Implores the Grace of Esther.* Imaginative improvisation of line and area within a realistic idea to create felt abstract relationships. The numerous planes—transparent and perforated line planes, opaque surface and slanting planes—articulate a three-dimensional space that the planes themselves define in shallow depth.

tions as a surface which exists in space or as part of the canvas. Two edges will indicate the two directions of the plane surface. As we shall see later, the artist creates fundamental relationships of forms on the *surface of his canvas;* the placing of a line on the picture surface will create one edge of a plane, particularly that adjacent area to which the line gives a dominant direction. A plane may be considered both as part of the surface of the canvas and as a surface in depth.

There are two types of spatial planes: those parallel to the surface of the canvas, and those oblique to the surface, as shown in diagram 13; diagram 14 shows these two types of planes as if viewed three-dimensionally in relation to the surface of the canvas, for visualization purposes. Each type of plane, regardless of its position, is considered as having an imaginary horizontal and vertical axis. These serve as notations in thinking about or describing a plane, and around which a plane may be made to turn, in feeling, when related in opposition to another plane in the picture, diagram 15, regardless of whether the plane





DIAGRAMS 13 and 14

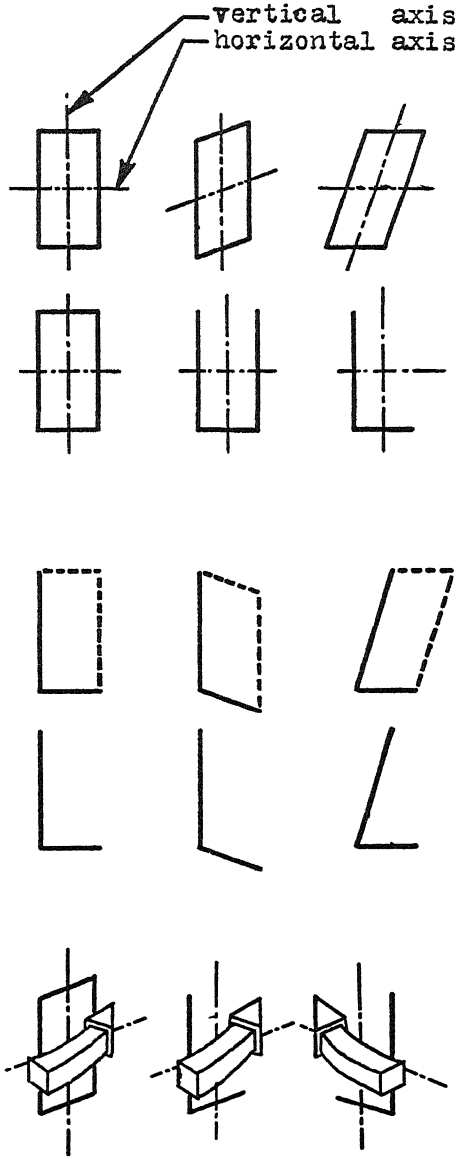
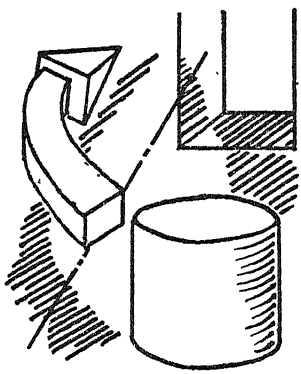


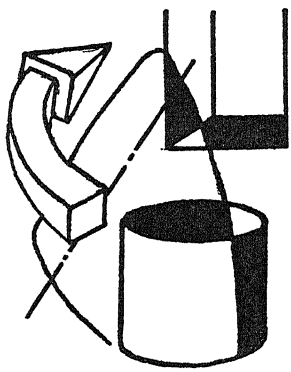
DIAGRAM 15. Each plane (top) can be thought of as having a vertical and horizontal axis. A plane (top and middle) does not have to be defined on all four sides; three edges, two edges and even one edge is sufficient to create a plane. One plane (bottom) can be made to turn in feeling about its vertical and/or horizontal axis when it is placed in a picture in opposition to another plane.

is represented by four, three, or two edges, or by a single line. A plane may revolve about its edge, instead of solely on its axis, pivoting out at one edge and in at another.

The edges of the plane describe not only its shape, but its spatial position. A flat rectangular plane, even a curved rectangular one, is the simplest, and the most direct indication of the spatial direction of a surface, for then two basic directions of a plane are most directly created. While planes that are varied in shape may have a major space direction determined by the dominant direction of its edges, several subordinate planear directions within it—when the plane is varied in shape—may also be created at the same time.

The old masters, emphasizing realism, used chiaroscuro to create numerous subtle planear movements to reinforce or contrast the obvious planes, diagram 16; while the





DIAGRAMS 16, 17. Some of the planes employed by the old masters were formed by edges of realistic forms in combination, the so called "hidden," or rhythmic structural lines running through their work, or by light and dark abstract chiaroscuro planes, diagram 16. The contemporary painter frequently creates an abstract plane moving about an axis while emphasizing the two-dimensional character of the picture plane rather than recessional space, diagram 17.

modern artist creates these movements through the direct use of obvious line, color and value planes, emphasizing flatness, pattern, and color intensity, diagram 17.

While a plane which is oblique to the surface of the canvas may, because of optical illusion, be imagined to exist in two different positions, i.e., it will appear to reverse its position, its felt position relative to other planes in a painting will define its exact spatial position. The felt relationship of this plane created by the artist can determine its position, for one plane will be experienced as it acts upon and balances another plane.

How planes, a fundamental tool in painting, are used by the artist, how he relates them two- and three-dimensionally in a picture, how he communicates his experiences through his understanding of its function, and how it helps him develop creative form, must be examined in order for the artist's language and vision to have meaning for us.

CHAPTER SEVEN

Tension and Two-Dimensional Space

A PRINCIPAL law of art and life is equilibrium, which results from the balancing of opposing forces. The artist describes the experiencing of these forces as emotional tension.

Emotional tension is rooted in body response which has such a primary function in the very act of knowing. A person reacts with his whole body to an object or situation. In the arts the artist makes himself at one with his work, feeling himself into it. Sensitive relations of forms in a picture are the stimuli to body-felt movements (tensions and inner stresses) in the spectator.

The importance of considering body-felt response as a fundamental factor in experiencing is indicated by the following quotations:

"When an individual reacts to an object or situation, his whole body reacts. For us this means that manual organization, language organization (after it begins), and visceral organization all function together every time the body reacts.

"These three forms of organization could not function together in mutually supplementary . . . ways unless we put on these organizations simultaneously as parts of one complete and integral function . . .

". . . we think with the whole body." [1]

"These inner movements of the body constitute the human instrument by which we respond to a vast range of qualities in the outside world. These are the inner tensions, the stresses 'felt' in the shoulders or other parts of the body. But these inner movements are more than the specialized 'felt-movements,' 'felt-abstractions,' 'felt-expressions,' of our poets and painters and musicians and architects. *They comprise the very body instrument by which we respond with the meaning of traits and qualities of objects.* . . .

"Many students during the past fifty years have provided impressive support for the hypothesis not only that the act of knowing is generalizing, but also that the actual process of generalizing goes on through the felt-relations of body-response." [2]

"Contemplate anything by itself—anything whatever that can be so contemplated. Attend to the whole and drop the parts out of attention altogether. One can approximate nearly enough to the accomplishment of that to see that the result of its perfect accomplishment would be that one

[1] John B. Watson, *Behaviorism.* W. W. Norton & Co. 1925.
[2] Harold Rugg, *Foundations for American Education.*

would have in his consciousness at the moment nothing but a quality of feeling . . . to be conscious is nothing else than to feel." [1]

"Now let us try to settle for ourselves as definitely as we can, just how this central nucleus of the self may feel, no matter whether it be a spiritual substance or only a delusive word.

"For this central part of the self is felt . . . when it is found, it is felt; just as the body is felt, the feeling of which is also an abstraction, because never is the body felt all alone, but always together with other things. Now can we tell more precisely in what the feeling of this central active self consists,—not necessarily as yet what the active self is, as a being or principle, but what we feel when we become aware of its existence? . . .

"But when I forsake such general descriptions and grapple with particulars, coming to the closest possible quarters with the facts, it is difficult for me to detect in the activity any purely spiritual element at all. Whenever my introspective glance succeeds in turning round quickly enough to catch one of these manifestations of spontaneity in the act, all it can ever feel distinctly is some bodily process, for the most part taking place within the head.

"In the first place, the acts of attending, assenting, negating, making an effort, are felt as movement of something in the head." [2]

"The reader will not have forgotten, in the jungle of purely inward processes and products through which the last chapters have borne him, that the final result of them

[1] Charles Pierce, *Collected Papers*, Vol. I. Harvard University Press.
[2] William James, *Principles of Psychology*, Vol. I.

all must be some form of bodily activity due to the escape of the central excitement through outgoing nerves." [1]

". . . . *in the real world the things seem to move, but in the canvas world, you move.* . . . Every picture which attains form, makes a movement-demand upon the spectator. This movement-demand is the result of organization." [2]

"In creative painting, control of movement of interrelated plastic means, is the first secret of formal design. From the opening of a picture with a partitioning of the field, through a main thrust into deep space, back to a stabilization or equipoise, with innumerable minor thrusts, tensions, recessions, and returns along the way, the artist must foresee how the movement skeleton will be coiled within the picture enclosure." [3]

When the artist speaks of experiencing emotional tension and movement while painting, the feelings can relate directly to the lines, forms and colors on the canvas. He coordinates these elements of design to create an equilibrium of movements or forces.

John Marin, in 1913, when he was painting scenes of New York City, stated that he experienced a push and pull of forces among forms:

"We have been told somewhere that a work of art is a thing alive. You cannot create a work of art unless the things you behold respond to something within you. Therefore, if these buildings move me, they too must have life. . . .

"It is this 'moving of me' that I try to express. . . .

"I see great forces at work; great movements; the large buildings and the small buildings; the warring of the great

[1] William James, *Principles of Psychology*, Vol. I.
[2] Louis Danz, *The Psychologist Looks at Art.* Longmans' Green & Co.
[3] Sheldon Cheney, *Expressionism in Art.* 1934. Liveright Pub. Corp.

and the small; influences of one mass on another greater or smaller mass. Feelings are aroused which give me the desire to express the reaction of these 'pull forces,' those influences which play with one another; great masses pulling smaller masses, each subject in some degree to the other's power. . . .

"And so I try to express graphically what a great city is doing. Within the frames there must be a balance, a controlling of these warring, pushing, pulling forces. This is what I am trying to realize. But we are all human." [1] (See figure 26 for a reproduction of Marin's painting.)

In speaking of his painting *Improvisation No. 30,* Wassily Kandinsky related that he felt a strong inner tension and the need of a form in a particular position on his canvas, figure 23:

"The designation 'cannons' is not to be conceived as indicating the contents of the picture.

"These contents are indeed what the spectator *lives,* or *feels,* while under the effect of the *form and color combinations* of the picture. This picture is nearly in the shape of a cross. The center—somewhat below the middle—is formed by a large irregular blue plane. (The blue color itself counteracts the impression caused by the cannons!) Below this center there is a muddy-gray, ragged second center almost equal in importance to the first one. . . .

"The presence of the cannons in the picture could probably be explained by the constant war talk that has been going on throughout the year. But I did not intend to give a representation of war; to do so would have required different pictorial means; besides such tasks do not interest me—at least not just now.

[1] "Camera Work," April-July, 1913, No. 42-43.

"This entire description is chiefly an analysis of the picture which I have painted rather subconsciously in a state of strong inner tension. So intensely do I feel the necessity of some of the forms, that I remember having given loud-voiced directions to myself, as for instance: 'But the corners must be heavy!'" [1]

ANALYTICAL DRAWING:

FIRST STAGE [diagram 18]:

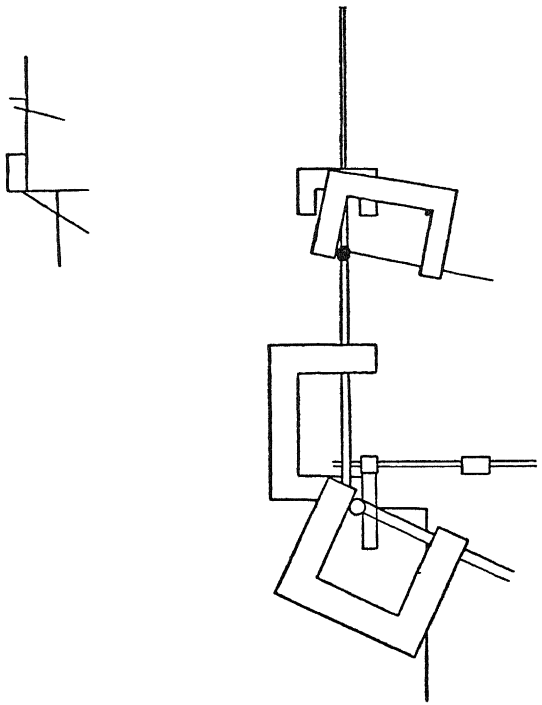


DIAGRAM 18

Further material by Kandinsky on tension in art is incorporated in his description of the course he gave at the Bauhaus in Germany:

[1] Arthur Jerome Eddy, *Cubists and Post-impressionism.*

The students began with still-life compositions, and their analytical problems were:

1) Reduction of the entire composition to a simple, major form, to be determined by the student himself.

2) Distinguishing the characteristic forms of single parts of the still-life, studied separately and afterwards in relation to the whole composition.

3) Rendering of the entire composition in a simplified line-drawing.

Gradual transition to the SECOND STAGE [diagram 19] of instruction, briefly described as follows:

1) Indication of the tensions discovered in the composition—rendered in line drawing.

2) Accentuation of the principal tensions through the use of broader lines or the use of color.

3) Indication of the constructional net with its focal or starting points [see the dotted lines in diagram 20]; the objects suggested are a saw, a grindstone and a pail.

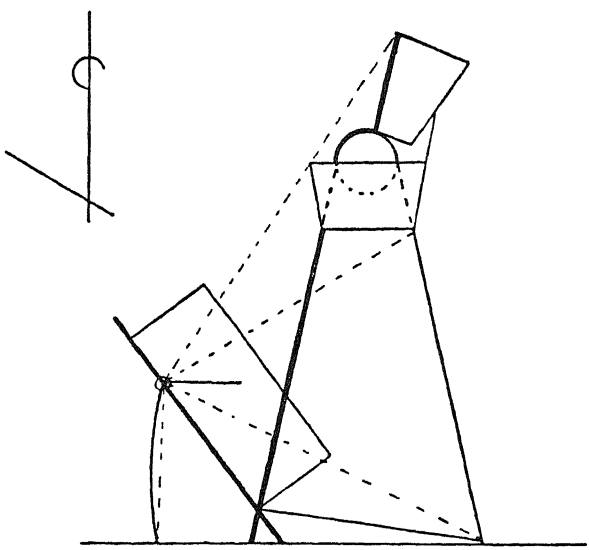


DIAGRAM 19

THIRD STAGE [diagram 20]:

1) The objects are considered solely as energy-tensions; the composition is reduced to arrangements of lines.

2) Different possibilities of the composition: obvious and hidden construction:

3) Exercises in the most drastic simplification of the whole and of the individual *tensions*—concise, exact expression.

Subjects and methods can be described only very generally in these few words. In many cases there are more possibilities to be considered than have been indicated here. For instance, the main theme of a composition can be explored in relation to the most varied partial *tensions,* such as significance of single parts of the composition, their weight, center, shape, character, etc.

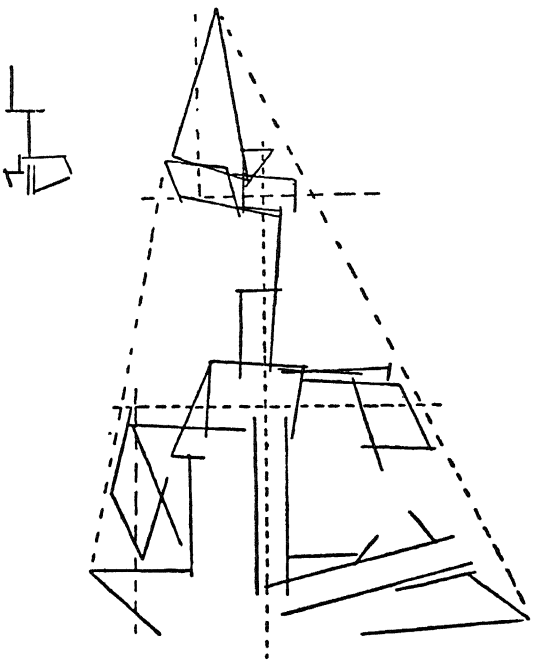


DIAGRAM 20

The following must be added:

1) Drawing instruction at the Bauhaus is training in observation, in exact seeing and exact rendering, not of the external appearance of an object, but of its constructional elements, of their logical forces or tensions which are to be discovered in the objects themselves and in the logical arrangement of them. The handling of plane surfaces is preliminary to the handling of space.

2) Drawing instruction is based upon the method in my other courses, and which in my opinion should be the method used in all other fields.[1]

Piet Mondrian (figure 21), has spoken of tension and the equilibrium of movement.

"Whether obscured or clarified, rhythm expresses dynamic movement through the continual opposition of the elements of composition. By this means, plastic art expresses *action* in a real plastic way. It creates action by the tension of the form, lines, and the intensity of the colors. In art, we distinguish oppositions of position and dimension. . . .

"The expression of pure vitality which reality reveals through the manifestation of dynamic movement is the real content of art. . . .

"It must be emphasized that it is important to discern two sorts of equilibrium: (1) a static balance and (2) a dynamic equilibrium. The first maintains the individual unity of a particular form, single or in plurality. The second is the unification of forms or elements of forms through continuous opposition. The first is limitation, the second is extension. Inevitable dynamic equilibrium destroys static balance. Opposition requires separation of forms, planes, or lines. Confusion produces a false unity. . . .

"Art has shown that universal expression can only be

[1] *Bauhaus 1919-1928*, The Museum of Modern Art, 1938.

created by a *real equation of the universal and the individual.* . . .

"Disequilibrium means conflict, disorder. Conflict is also part of life and of art, but it is not the whole of life or universal beauty. Real life is the *mutual inter-action of two oppositions of the same value but of a different aspect of nature.* Its plastic expression is universal beauty. . . .

"When dynamic movement is established through contrasts or oppositions of the expressive means, relationship becomes the chief preoccupation of the artist who is seeking to create equilibrium.

"Intrinsic reality—dynamic movement is established in abstract art by the exact determination of the structure of forms and space, in other terms, through the composition." [1]

Paul Klee (see figure 53) wrote of opposition of movements and conflicts of forces: "As a basic norm for this composition one may accept this definition: a coordination of organs into an independent, self-reliant, quiet-moving, or moving-quiet whole. This composition can only be accomplished if movements are complemented by counter movements, or if a solution of the problem of infinite movement is found. . . . The organism of movement is a highly intricate scheme and demands a highly developed ability of expression. . . .

"The Plummet-line: By swinging it back and forth it changes to a pendulum. [Diagram 21]

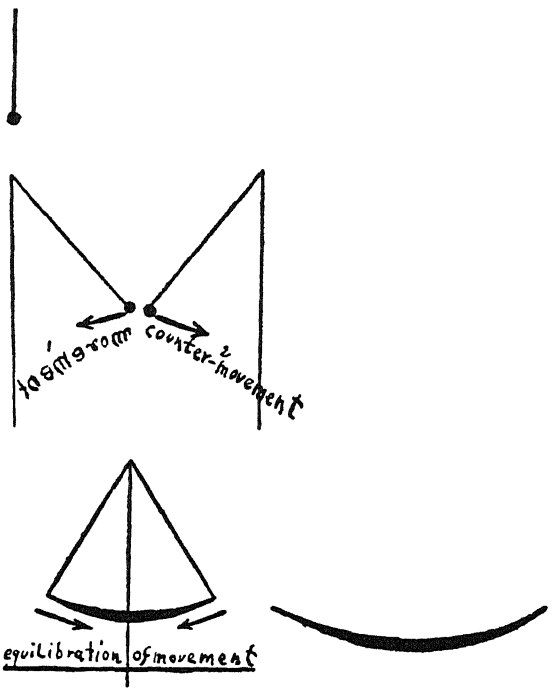
"Movement and counter-movement of the pendulum result in an equilibration of movement [diagram 22], or the graphic line of the movement of a pendulum with a static energy-initiator [diagram 23].

[1] *Plastic art and Pure Plastic art.*

"Active, intermediate and passive factors: *The Watermill.* [Diagram 24] (1) The conflict of the two forces, (a) gravity, and (b) the resisting mountain (both active factors), is expressed by (1) the diagonal waterfall (intermediate factor) which turns (111) the mill (passive factor)." [1]

The tension which the artist experiences when movements are in balanced opposition on a canvas, while similar to that which each of us experiences in life is unique in character. Elements in common with these in life include such things as emotional intensity, visceral tenseness, mus-

[1] Paul Klee, *Pedagogical Sketch Book.*



DIAGRAMS 21, 22, 23

cular reaction. But the artist's tension is different because it does not have to do with the personality adjustment of the individual as in life, though these too are basic considerations in common, but rather with line, color and form adjustment on a canvas. While the personality and temperament are part of his expression, they are general, though inherent, forces in creative work and not substitutes for the kind of emotional tension described here.

While emotions are made up of complicated combinations of psychic and physiological reactions, each type of emotion can be characterized. This is true also in the case of art. (Emotion can be described as diffuse body excitement, while feeling is emotion that takes on a different character with an appropriate adjustment.) The type of emotion with which the artist is concerned, and which we shall find is fundamental in painting (and sculpture), has been called "emotion-tension" or "force" in this book.

It is difficult for us to think of emotional intensity except in terms of an idea or situation that is pleasing, exciting, angering or frightening. But there is a particular emotional intensity that is visually stimulated by the relations of forms in a painting created by an artist. It is the

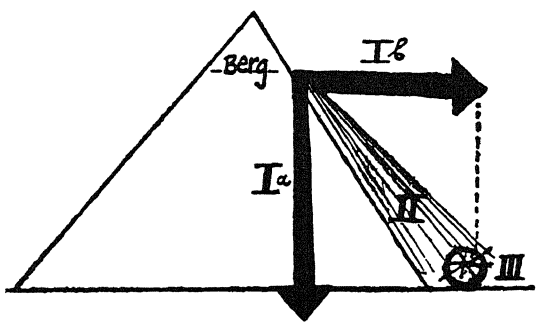


DIAGRAM 24

felt way that forms, colors and lines are placed on a surface that stimulates this emotion—and not the realistic content of the picture.

We think back to statements about the dignity and strength of vertical compositions and the free rhythmic movements of a curved composition. But beyond such ideas of emotion we are at a loss to understand any other kind of emotion belonging peculiarly to art. Body-felt emotion-tension is such an emotion and we must seek to learn about it, and eventually feel it, if we hope to experience fully what some of the great contemporary artists are doing, and for that matter, what great artists of the past felt in relating forms in their paintings.

Emotion-tension, or force, is an intensity that one first begins to feel in looking at forms placed on a canvas with great sensitivity. When we press our hands together, we experience a muscular tension. Can you visualize an emotional intensity of somewhat a similar nature which you feel deeply within yourself, viscerally, muscularly through your body, one which has many of the characteristics of other emotional intensities, yet is not exactly like any other, but visually stimulated. You should be able to experience that which an artist experienced in relating forms, for an artist's perceptual experience can so order his responses, select and direct them, as to give rise to a particular or unique emotion or tension in terms of a medium.

The artist expresses intense emotional tension through an equilibrium of the formal elements of his painting. (Klee and Mondrian, in quotations cited earlier, wrote of this equilibrium.) In painting this opposition does not exist until two or more masses react on each other to produce a felt force; that is, one form cannot act upon another to

create a stronger force in one direction without equal opposition somewhere in the picture, for the force is the product of the *mutual action* on each other or at least two forms, or two elements. A relationship, in other words, is necessary. One form cannot create emotion-tension; it is in the relationship of two or more forms or in the relation of the masses to the edges of the canvas that force is created.

When the artist places a spot of color, a line, a texture, a light or dark mass on a portion of the canvas, he can experience a body-felt tension. (Kandinsky described this experience when painting *Improvisation No. 30,* quoted earlier.) In so doing he imparts something creative and vital in his painting; the forms when related at the moment the artist feels this body-felt tension can communicate this felt force to the spectator—if the spectator looks for relationships of forms, not just at the forms themselves, and attempts to experience them as body-felt oppositions of movements.

The stronger the felt opposition of forms which the artist experiences when he is painting and the clearer he is about the nature of this feeling, the stronger may be the emotional projection in his medium.

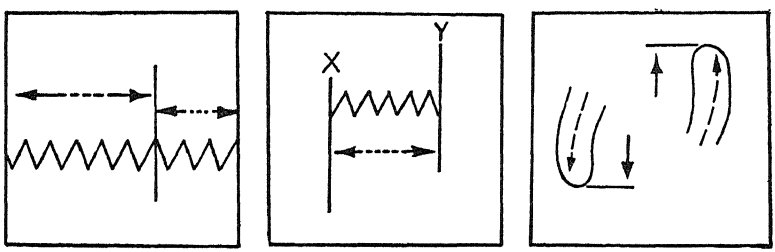
The emotional intensity that the artist feels in the process of placing masses on the canvas, is tension between forms. One mass pushes in one direction, and another opposes it; *this takes place in two-dimensional directions, i.e., on the surface.* The masses, of course, do not really move, but rather exert a force felt bodily through the nature of their related placement on the canvas.

Opposition does not only exist between two planes, but between a plane and the edges of the picture plane, dia-

gram 25. In diagram 26, planes X and Y, represented by a line, illustrate how movement and tension can be created. The tension is shown by a jagged line, with the arrows indicating the directions of the opposing movements. Linear movement does not produce tension; *felt* surface oppositions do, diagram 27. Tension is not produced on the picture itself, but is something that can only be realized through felt experiencing.

Force is that which tends to produce, stop or change the motion of a body. There is no actual movement in a painting, for actually the forces do not produce motion, but rather show its direction.

The first mass on a canvas need not be adjacent to the second mass; one may be at the top of the canvas and the other in the center; one mass may be on the left of the picture and the second mass on the right. A mass on a certain portion of the canvas may be made to exert a force toward the left or toward the right, depending upon the relation that has been created between it, the edges of the picture and the other masses in the canvas. One mass moving strongly to the right at the top of the canvas moves so in relation to other masses, creating a force toward the left. A mass may have at the same time

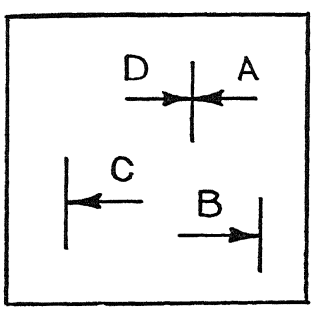


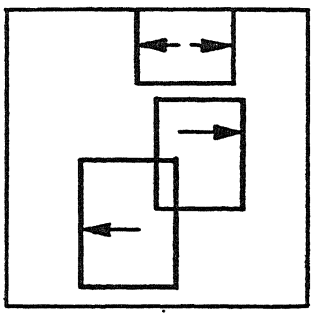
DIAGRAMS 25, 26, 27. Felt opposition tensions between lines, edges and areas.

two opposite movements in a canvas, each being created through a relation to different masses. In diagrams 28 and 29, A and B oppose each other and C and D are in opposition; B and C are in opposition. The feeling of the artist creates the direction.

The experiencing of this force is subtly expressed though intensely experienced. It is not something seen; it is something experienced. For example, if we look at two reproductions of the same portrait by Cézanne, figures 20 and 21, in one of which the background has been slightly changed, the mere observation of the obvious changes themselves will not necessarily make a great deal of difference if thought of in terms of linear and pattern design, but will make a tremendous difference in terms of tension and spatial relationships, actually going a long way toward destroying the picture as a whole. The force exists because of felt opposition between two masses: the very nature of the felt force, the stimulus for which is a visual relationship, depends on the opposite felt movement of the masses. Therefore, when the artist creates a force he gives direction to it.

These forces are felt also in the relation of an edge of one mass to the edge of another, by the relation of one

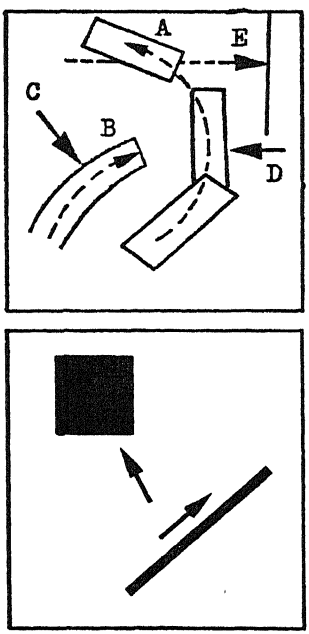




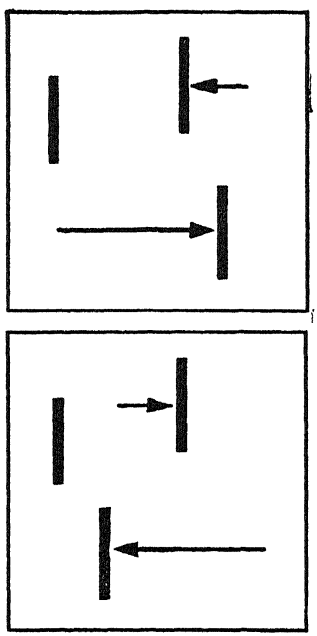
DIAGRAMS 28, 29

line to another, and by the relation of the areas adjacent to both the mass and the line.

While the linear direction of a mass may guide a movement, the linear direction will not in itself produce felt movement—only the emotion-tension feeling will. Closed forms can be grouped to have a linear direction, A and B, diagram 30. This will not create surface opposition until each form is made to oppose each on the surface. One opposition, for example, is shown by arrows C and D. In other words, the so-called "rhythm" of A and B can merely be mechanical if it is not very strongly related emotionally. Each element that is added on the canvas affects the whole. For example, by placing line E in the picture the artist will



DIAGRAMS 30, 31



DIAGRAMS 32, 33

create a surface opposition toward the right. It is important not to confuse *felt* opposition with the "visual pull" of masses and lines, diagram 31. These masses and lines help to direct movement but they do not as such create *felt* movements.

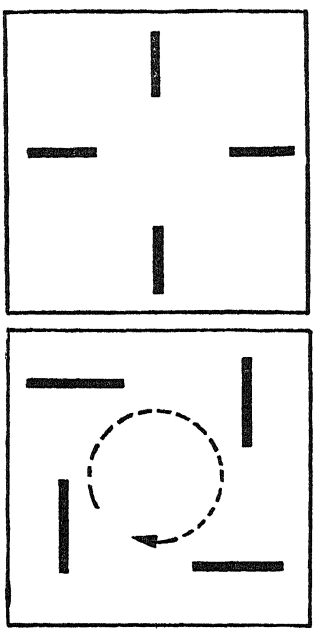
Two circles or the vertical line or vertical edge of masses, will create horizontal oppositions; and horizontal lines vertical oppositions. The direction given to the surface of the canvas, not merely to a form itself, but the placement of forms in relation to one another and to the vertical and horizontal edges of the picture will help create felt movement. If, for example, a form is placed at the right of the canvas, it will produce a longer distance to the left edge of the picture than to the right, and this surface distance will help create the movement of the form and picture surface toward the right, diagrams 32 and 33.

The basic directions of these forces are horizontal and vertical. This is due to the vertical and horizontal edges of the picture surface, to man's own physical relationship to his environment. The resolution of the vertical and horizontal forces can create opposing diagonal and circular movements.

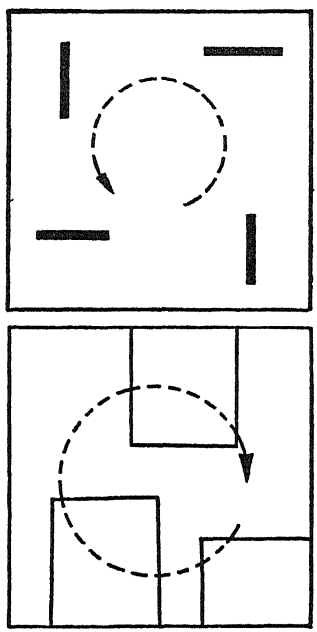
The process of producing emotion-tension surface movements is usually referred to as shifting. Through the relationships of forms, the artist produces movement and direction. When two forms are shifted, the entire surface is involved, not only the forms but, even more important, the spaces around the forms.

In diagram 34 the lines statically divide the canvas. It is necessary to disturb this exact equilibrium to create movement and a dynamic equilibrium. Diagrams 35 and 36 show shifting to produce clockwise and counterclockwise

movement on canvas. While the lines help direct the movement, the space between the lines and the edges of the canvas plays a dominant role, diagrams 32 and 33. Diagram 37 shows how forms can be related on the basis of shifting. Diagrams 38 and 39 illustrate how shiftings can function in a drawing of a realistic object, while diagram 40 and figure 37 illustrate how the realistic form is destroyed as emotional relationships take precedence over the realistic, creating surface oppositions and spatial relationships as well. Figures 25–30 illustrate the forms that shifting may take in different painters' work. In diagrams 41 and 42 the design has been changed; the lower right area was moved to the right to illustrate how a design may be shifted in order to create or intensify tension relationships. Not only



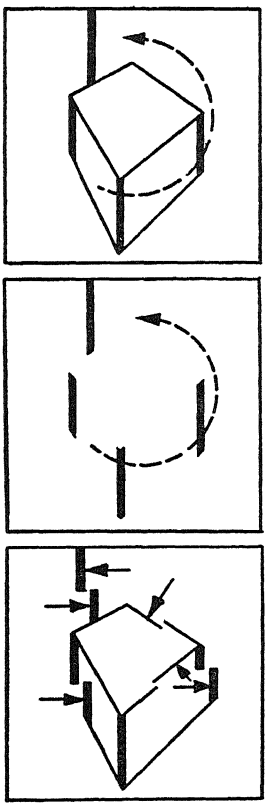
DIAGRAMS 34, 35



DIAGRAMS 36, 37

simple edges, but masses are felt as complexes or groups which function as units in movement relationships.

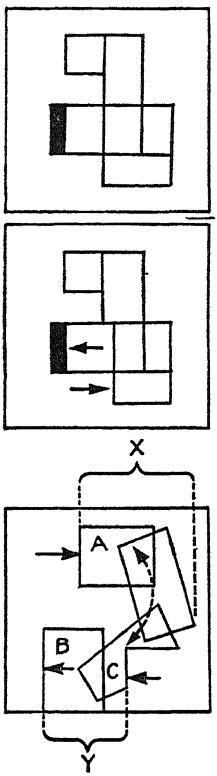
The shifting on the canvas directs the dominant tension movements. In diagram 43 not only are planes A and B shifted, A to the right and B to the left, but the diagonal plane C has been cut through to reinforce the shifting at the bottom of the canvas to the left. The proximity of forms, their grouping—as either a complex, or combination of forms through closeness, through color, or through lines —will help the eye to see their total relationship with regard



DIAGRAMS 38, 39, 40. Possible abstract shifting relationships of a realistic form are suggested.

to other forms, singly or in groups. X and Y, for example, can be seen as two separate groups that are shifted apart on the canvas. Linear movement guides surface tension oppositions, helps to group forms, create rhythmic patterns, tie the picture together for the eye to grasp more easily.

Force is created by related masses, whether these masses are free shapes or are made by formal divisions of the surface, whether they are closed or open shapes, round or flat, areas of the background or the foreground. And this feeling for opposition of forces exists in the great works of the past and present.



DIAGRAMS 41, 42, 43. To illustrate how shifting operates when movement relationships are not obvious to the eye, diagram 42 has been changed from diagram 41 to establish movements indicated by the arrows. Forms are frequently distorted, cut through or "abstracted" for this purpose, diagram 43.

A feeling of force, in its simplest analysis, derives from a relationship of one mass to another mass; opposition is produced by the placement of the planes in such position that a force is felt at the moment the planes are placed on the canvas, and the spectator will experience this same force.

On the canvas, such forces as those found in nature, like the pull of gravity and the opposing forces of pulleys, levers and buttresses are represented, but instead of physical forces, emotional forces are created. The artist, in placing the masses, determines whether they function merely as balance or incorporate force as well.

The feeling for force and the feeling for balance—two different but related feelings—are often confused. Balance in painting is see-saw balance: the masses on one side of the canvas against the masses on the other side, one corner of the canvas against the opposite corner. This balance is compared to a see-saw, which is composed of a plank resting at its center on a fulcrum, with weights on each end. The further toward one end of the plank a weight is placed, the more leverage it possesses and the greater the weight that it can counterbalance on the other end. A small mass on one side of the canvas placed at a distance from the center balances a large mass on the opposite side close to the center. You might describe the sensation of balance as experiencing the relative weight of masses on the canvas, or even as the feeling of attraction of masses. But the feeling of forces, the experiencing of a dynamic equilibrium of forms on the canvas is an intense emotional experience in which the spectator actively participates. It is an emotional reaction to a relationship of forms each opposed to one another in feeling by the artist as he works. On the other

hand, the mere act of balancing forms on the canvas does not necessarily require great emotional intensity. A degree of sensitivity to how forms "seem" to hold on a canvas will often suffice.

The reason the feeling for force and for balance is confused is that the two processes function at the same time during creative activity. As the artist works, he develops his whole painting, opposing and balancing one form against another. In other words it is possible to experience balance without emotional intensity, but it is not possible to feel emotional intensity without balance; emotion-tension cannot be created without equilibrium—it incorporates balance in a more profound, more intense experience. When the artist works he may feel the need for a spot on a particular part of the canvas in order to balance it. When this feeling is intensified, i.e., is more strongly felt bodily, the emotion-tension experience occurs. While the artist, as well as the spectator, may experience emotional intensity regarding the placement of a mass on the canvas, as when he states, "I very strongly feel the need of a color or form in a particular spot on the canvas," he may simply attribute such feeling to a feeling for balance, without further investigating and disciplining the tension experience.

A balanced painting is not necessarily a creative painting. The artist may feel balance in his canvas and still not experience an emotional intensity. The expressive vitality of a painting is not determined by the passive juxtaposition of forms on the canvas but on a strong felt relationship of these forms.

Equilibrium is not simply the result of placing two lines at right angles, nor is it simply the placing of one form in depth on the canvas and another on the foreground, so as

to force the eye from deep space back to the surface of the canvas constantly. Neither is it a process of using optical illusions such as fluctuations of the surface where one form seems to come forward and then recede. Rather, the dynamic equilibrium of emotion-tension has to do with what Mondrian has described when he says, ". . . the equilibrium of any aspect of nature rests on the equivalance of its opposites."

The experiencing of opposition in a picture is a highly tense emotional state. Reliance on this state of emotional tension alone in developing a painting can be inhibitive. It is necessary to find its role in terms of the whole creative act. And in so doing, we must keep in mind that the relation between the conscious (directing) and subconscious forces is highly subtle and individual.

CHAPTER EIGHT

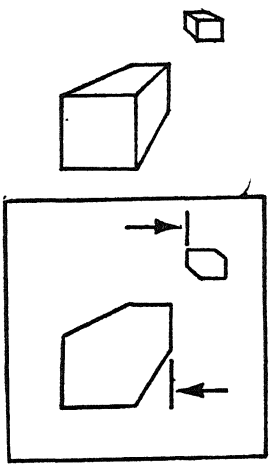
Three-Dimensional Space

SPACE in a canvas is illusionary, and the surface relationships are the means by which emotion-tension is created—see diagrams 44 and 45. Yet all paintings have some indication of depth. Perspective, foreshortening, lines at an angle to the edges of the canvas, forms placed at different heights on the canvas, size differences, value differences, changes in color, all have influence on the depth of a painting. How can we reconcile illusionary space with the two-dimensional character of the picture surface?

Space is not merely the emptiness around forms in the canvas, but can be felt as space-force which pushes in on the canvas and is balanced by a pushing out. The means by which this is accomplished, the principles involved, the necessity for achieving spatial balance and the nature of

the relation between the third dimension and the two-dimensional canvas are discussed in this chapter.

While perspective, slanting planes or shading direct space, they do not create a spatial force. The relation of planes on the surface of a canvas creates force. The space itself does not. But since space is defined by planes, the movement that activates them, also activates the space and it functions as an integral part of the surface relationships, diagram 46. When planes move in opposition about their axes, the surface opposition is responsible for the felt spatial force, as illustrated by the two planes emphasized in the analysis of Cézanne's *The Sainte Victoire*, figure 19. That is, the space that the planes create becomes active by association with the emotion-tension relationships. The space directed by the planes takes on the intensity of the emotion-tension. This means that opposition in space movement is necessary in experiencing a space force. A movement into depth on one part of the canvas is opposed by a movement forward on another part of the canvas.



DIAGRAMS 44, 45. The experiencing of depth is not a fundamental part of the emotion-tension feeling—since it can still be experienced when the third-dimension is eliminated, diagram 45.

It is difficult to observe how space moves toward the observer out of depth, for when the third-dimension is represented in a canvas, space appears to move only into depth. Movement out of depth is created by feeling rather than by a system. Instead of seeing space only realistically —that is, its receding quality—the artist feels it in terms of its push and pull quality, and in terms of planear oppositions independent of the realistic forms and realistic space, diagram 54.

The creation of spatial forces depends upon the two-dimensional picture plane. The artist does not punch holes in his picture through which the spectator can tumble into the depth, without any force pushing him back. Instead he recreates the surface of his canvas, i.e., its two-dimensional equilibrium. Even though the creative artist may not be aware that he is balancing spatial forces in his picture two-dimensionally, in the intensity of creation he often achieves this balance quite automatically.

The space defined by a plane through its position or through its movement in depth because of its relation to another plane, the combination of the directions of planes and the placement on the horizontal ground plane (in fact, all means of indicating depth), can create a space force

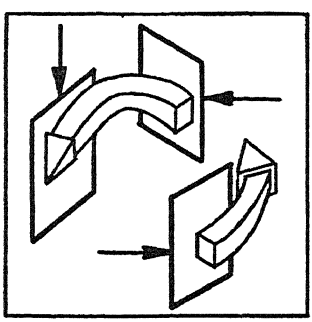


DIAGRAM 46. The tension directions of planes has a fundamental role in the direction and movement of three-dimensional space.

when the plane defining the space creates an emotion-tension surface relationship. For example, when a form creates a movement up on the canvas in a tension relationship, the space defined by that plane moves up; and when one plane is placed close in the picture, and one more distant, and each is activated by the surface movement, the closer form is felt to move forward, and the more distant form is felt to move back in opposing space movements. The surface oppositions, which one experiences as he "sees," keep the forms strongly related on the surface. As a movement into depth is felt, another out of depth is experienced: a movement into depth seeks a compensating movement forward, when space and emotion-tension relationships are experienced together.

Now while the spectator experiences this strong body felt tension, spatial suggestions enters in: the form that creates depth will start a movement into the picture—but the surface oppositions demand a counterbalance, so a movement out of the picture is experienced in conjunction with a movement out of the depth. This creates a volume movement around an imaginary point or axis, which in turn is balanced by another volume movement.

The horizontal and vertical relations of planes have an important effect on space movements. A plane may create a force in its vertical and horizontal relationships, almost irrespective of the direction in which it slants in space. The importance of these relationships has been strongly brought to attention by Mondrian in his work. Paul Klee has also emphasized the importance of these basic directions in our visual relations to nature and to the canvas:

"Once more the Vertical."

"Why is [diagram 47] wrong as representation of a steep house wall? It is not wrong logically because the lower window openings are closer to the eye than the upper ones, which means in terms of perspective expression: 'larger.' As representation of a floor this diagram would be easily accepted.

"This picture then is *not logically wrong*, but *psychologically wrong*.

"The creature—in order to maintain his equilibrium—insists upon a representation of all actual verticals as verticals." (*Pedagogical Sketchbook.*)

Our orientation toward nature is such that the higher natural objects are placed on the ground, the further from us they are in space. The earth's horizon line, as we know by the laws of perspective, is always on a level with our eyes. When we stand in an unobstructed field, the earth is a surface which extends away from us, disappearing from view on the horizon line. If you look across your room and the chair is closer than the table, its position on the floor will be lower in your field of vision than the table. This spatial relationship of objects common to our everyday experience influences our spatial orientation in a picture.

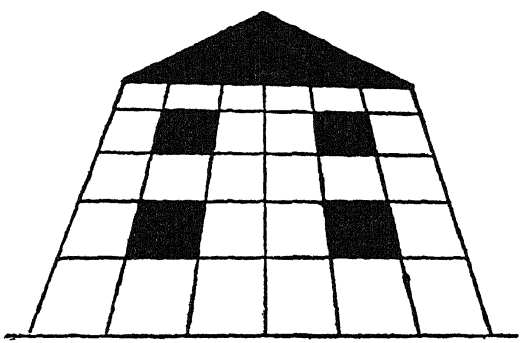


DIAGRAM 47. "The creature—in order to maintain his equilibrium — insists upon . . . actual verticals as verticals." (Paul Klee)

FIGURE 23 (top). Wassily Kandinsky: *Improvisation No. 30.*

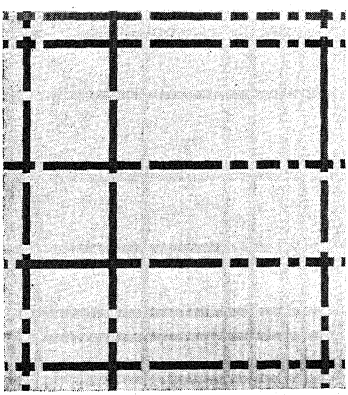
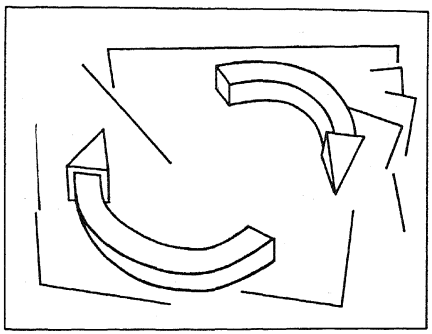


FIGURE 24 (bottom). Piet Mondrian: *New York City.* The importance of the picture plane and two-dimensional movement, in place of simple perceptual space experiencing, has been emphatically demonstrated by Mondrian.

FIGURE 25 (top). Analysis.

FIGURE 26 (bottom). John Marin: *On Morse Mountain, Small Point, Maine, Series #6.* The dominant spatial organization of this water color is indicated. The movement of the picture has been created by the two-dimensional shifting of the lower planes to the left and of the upper to the right. By means of linear movements, and by dark areas of emphasis at the upper left and lower right center, the right side of the picture is pulled forward as the left side is pushed in; at the same time the large plane at the left reverses and balances this movement by pushing down and forward as planes on the right push up and in. (This and all the other diagrams are merely a very crude visualization of a few elemental formal relationships; only two or three of literally hundreds of *inter-dependent* relationships are indicated; these diagrams cannot take the place of the individual, personal experiencing of art. They are nothing more than clues. The few formal relationships that they indicate are only part of the larger *total expression* of the art work.)



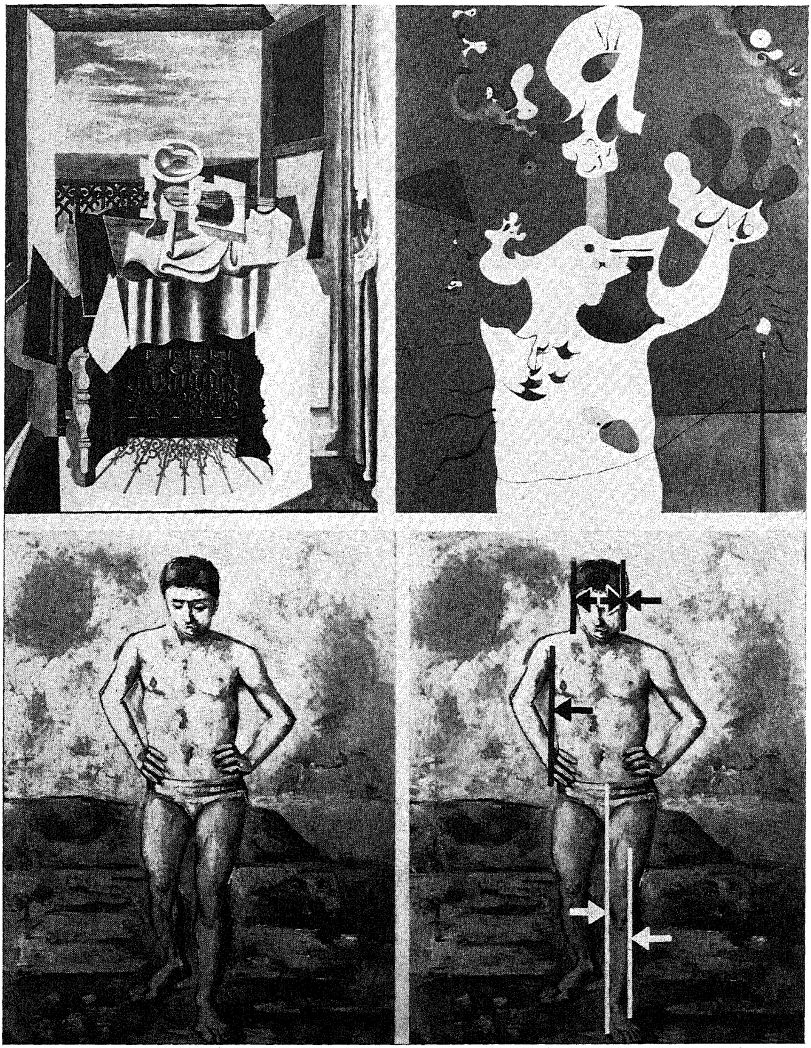


FIGURE 27 (upper left). Pablo Picasso: *The Window.* The doorway opening has been shifted to the left. Note also three dimensional space techniques employed: flat against modeled shapes, opaque against perforated forms, two-dimensional versus perspective planes.

FIGURE 28 (upper right). Joan Miro: *The Potato.* The large, lower-vertical, white plane has been shifted to the left in relation to the upper portion of the painting.

FIGURES 29, 30 (bottom). Paul Cézanne: *The Bather.* The shiftings, being subtle, are not easily observed in this painting, but they are *felt.* (Collection The Museum of Modern Art, New York.)

FIGURE 31. El Greco: *Portrait of a Man.* There are two major opposed volume movements: one made up of the body and right diagonal fur collar moving left and down into depth, arrow E, axis A, while the head pushes forward; and a second volume made up of the left fur collar pushing forward towards the right, arrow F, the right bottom corner of the picture moving up and in, and the forms comprising the head, push diagonally up and into depth towards the left, planes H and I, axis B. Surface tension movements C oppose movements D. The movements are complex and take place simultaneously. A rough visualization of forms in space apart from realism might result in an abstract construction somewhat similar to that shown in figure 33.

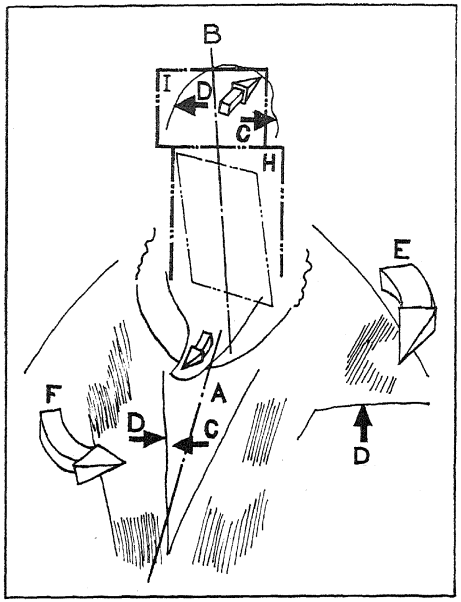


FIGURE 32.

FIGURE 31.

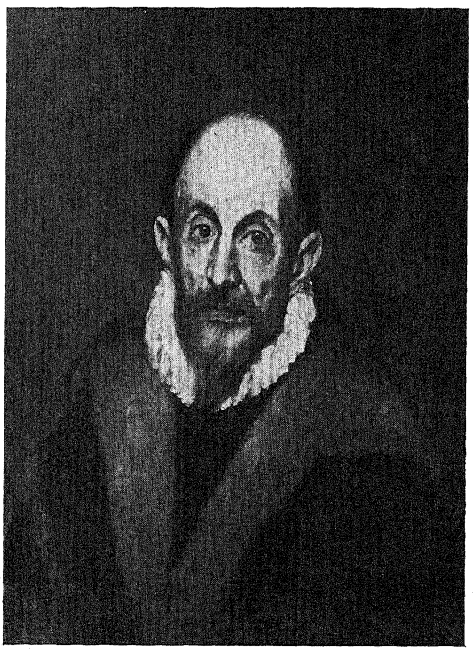
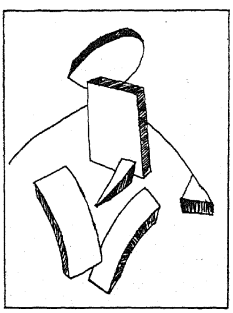
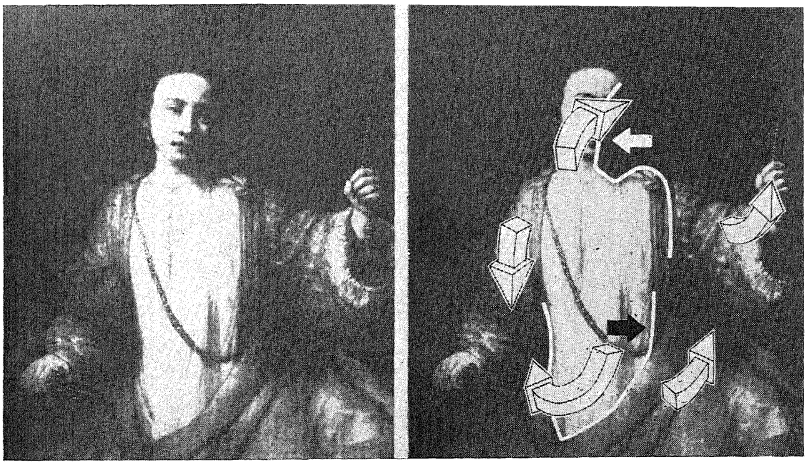


FIGURE 33.

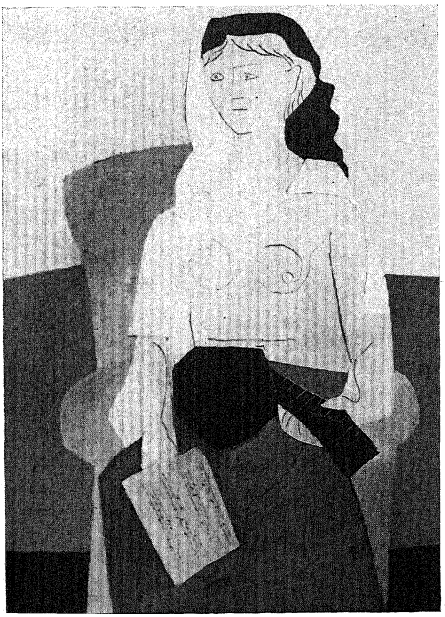


FIGURES 34, 35 (top). Paul Cézanne: *Madame Cézanne Dans la Serre.* The movement between A and B, arrow C, is continued by the skirt, arrow F. Opposed to this are parts of the body, arrows D, G and H, the diagonal movement up of the tree, B, and the movement into depth from left to right of the ground plane, edge E.

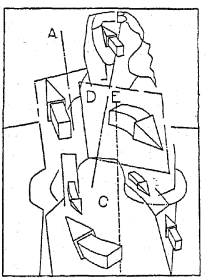
FIGURES 36, 37 (bottom). Pablo Picasso: *Portrait of Braque.* While the face directs space in towards the left, the shoulders and body move oppositely. Numerous subtle plane movements support and contrast these two movements.

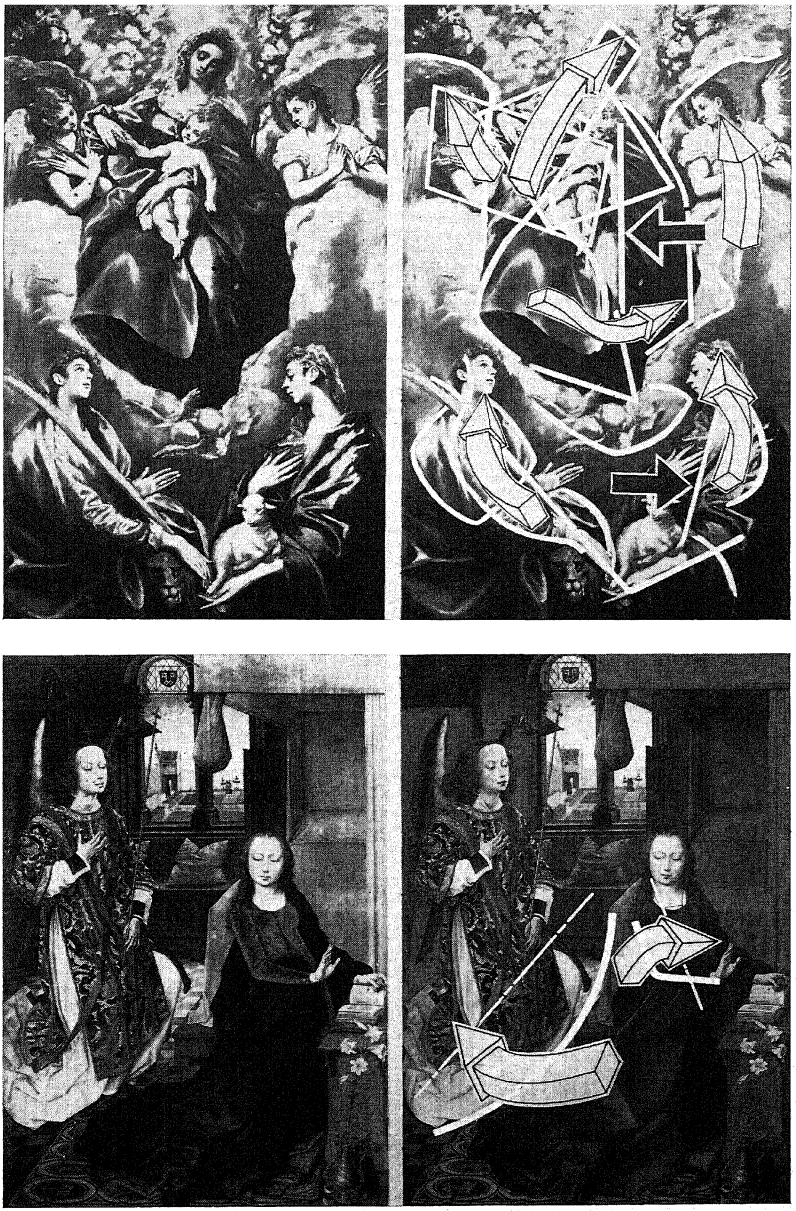


FIGURES 38, 39 (top). Rembrandt van Rijn: *The Suicide of Lucretia.* Through the play of light on the figure, Rembrandt has manipulated the felt relationships of forms abstractly, yet maintaining realistic form. One such relationship has been indicated. There is a twisting spatial movement to the body: the lower garments direct space down and into depth toward the left, while the face directs space in toward the right. The flat arrows refer to the two-dimensional emotion tension opposition, while the three-dimensional arrows indicate spatial movements.



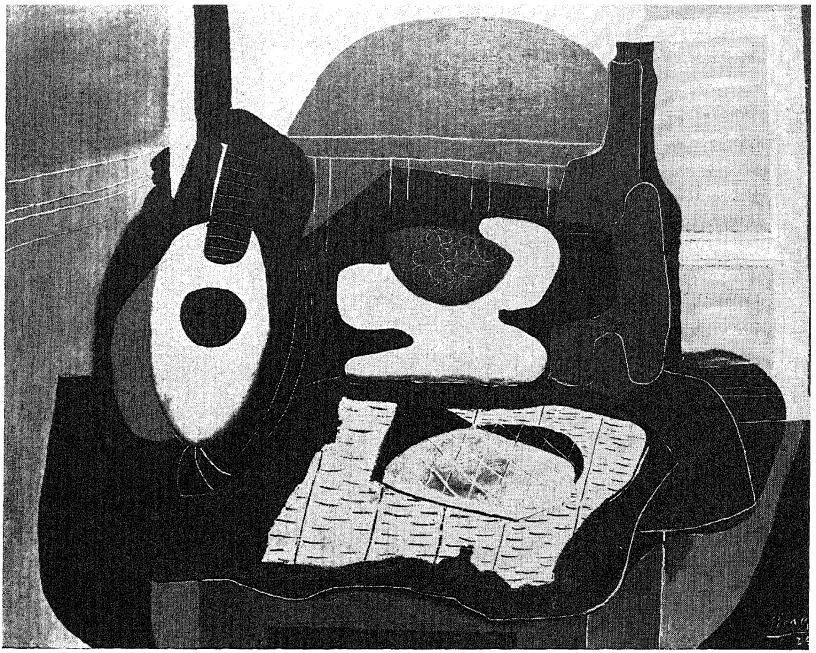
FIGURES 40, 41 (bottom). Pablo Picasso: *La Femme à la Mandoline.* Planes are organized in a diagonal, step-like direction into depth, planes C and D, axis B. Opposed, is the back of the armchair, skirt, and sheet of music, axis A. Also surface and three-dimensional spaces move left and in, at the bottom; and right, forward, at center creating a volume movement about axis E.

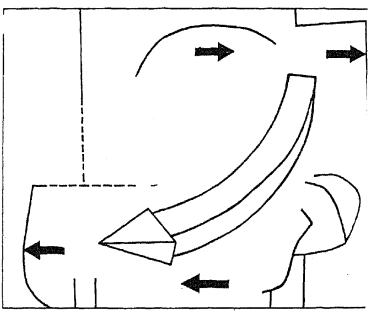




FIGURES 42, 43 (top). El Greco: *The Virgin with Santa Inez and Santa Tecla;* and plane and movement analysis.

FIGURES 44, 45 (bottom). Roger van der Weyden: *The Annunciation;* and analysis, with two opposed planes indicated.





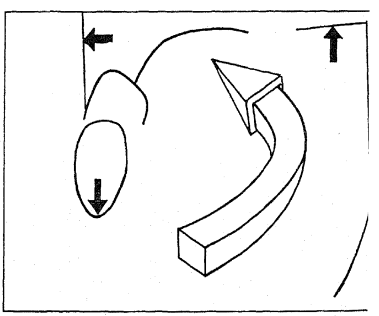
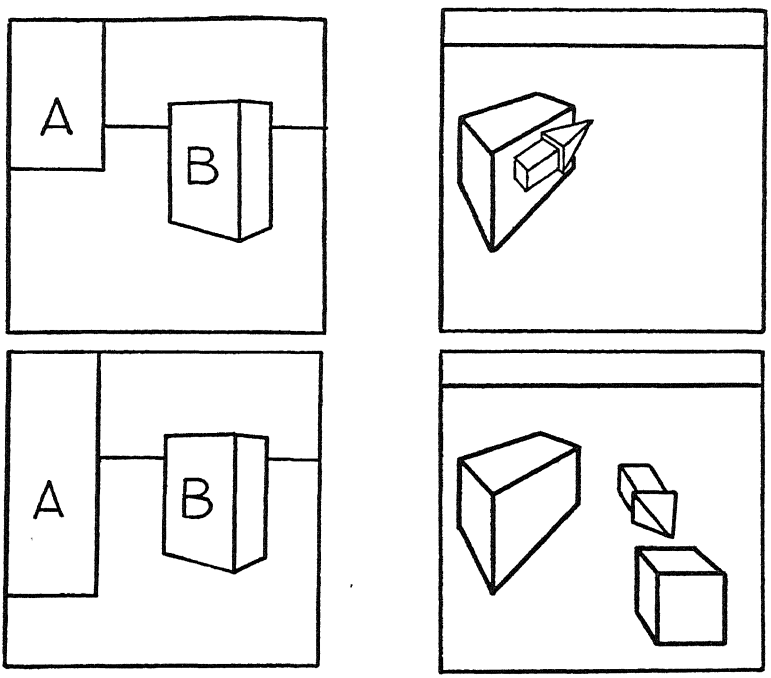


FIGURE 46 (top). Pablo Picasso: *Still Life with Cake.* (Collection The Museum of Modern Art, New York.)

FIGURES 47, 48 (bottom). Analysis. The white area of the background has been shifted toward the right in relation to the dark area of the table; this helps to create the two-dimensional tension and three-dimensional movements shown in figure 47. This is opposed by surface and space movements indicated in figure 48, composed of the white window area at right and top, the mandolin at left, the newspaper with the melon in foreground.

The placing of one form higher on the canvas than another, will not in itself produce depth; not unless such placement takes place within a whole composition in which some indication of depth by overlapping, slanting planes, size, value or color differences, establish some space representational factors. But such space representations need only be elemental. The horizontal and vertical relationships then become very important, and a form placed low on the canvas in relation to a higher form can create strong space forces. Within a composition when some



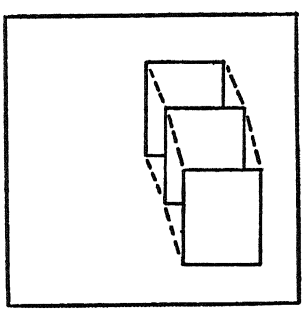
DIAGRAMS 48-51. The vertical distances of forms from the bottom edge of a picture have a very important three-dimensional organizational function in a picture. By simply lowering one form, for example, the spatial movements in a picture may be reversed.

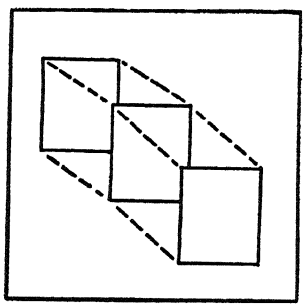
space representation exists and one form is moved lower on the canvas, it will often be felt to be closer than before, and the lower this form is moved, the further forward it comes. While the position of B has remained the same in diagrams 48 and 49, A in diagram 49 has been extended down on the canvas, which has the effect of bringing it forward and automatically pushing B back into depth. The main plane in diagram 50 directs space into depth, as illustrated by the arrow. By placing a second volume lower on the surface a counterbalancing movement can be started, diagram 51. These same movements can be created with the use of planes, without the volume representation. At the same time, the higher a form is placed, the further in depth it may be in relation to forms lower on the canvas. Overlapping, of course, takes precedence, for it very definitely establishes the relative space position of two planes. Yet there are areas in a canvas that do not have their space position definitely established, so that the distance apart vertically plays a dominant role in the spatial relationships.

The greater is the horizontal distance between planes when placed in space, the greater is the space distance seen between them. If two planes are overlapped, one directly above the other, the space distance that the spectator sees between them is less than if these two planes were shifted apart horizontally. When this change is made, the planes are no longer seen from the front, one above the other, but from the side; that is, the two planes together create a diagonal direction into depth, rather than a vertical one. In diagram 53, the distance of the planes vertically has remained the same as in diagram 52; only the horizontal distance of the planes has been changed. It is as if the spectator changed his position from directly in front of

the two planes, to a position at one side of them. When this horizontal shifting takes place the spectator can better see the distance into depth from one plane to the other. This seeing of the depth, coupled with a greater diagonal movement, creates a stronger depth movement. As the distance between the two becomes more apparent, the greater does the potential movement back and forward in space become.

The apparent space position of two objects by virtue of their natural realistic position—a tree, for example, appearing to be in great depth in relation to a house in the foreground—will not inherently produce the kind of depth we are speaking about here. While the difference between a perception of space determined by realistic appearance of forms in the everyday world, and a perception based only on those phases of spatial experience connected with forms on a two-dimensional surface, would appear at first glance to be negligible, actually a realization of this difference has a very important bearing on the understanding and experiencing of created spatial relationships. In other words, when perceptual space is more important in our experi-





DIAGRAMS 52, 53. The relative distances of forms from the side edges of a picture strongly influence their spatial movements in a picture.

encing of pictures than conceptual space, our appreciation of painting is often determined by what we have learned to see of form and space in the everyday world rather than by understanding and experiencing what we can feel and see in a painting.

Force is more closely tied up with the flatness of the canvas than it is with the realistic space portrayed. These conclusions are upheld by the fact that emotion-tension can be experienced through related forms on a canvas that do not in any way represent depth, as when, for example, horizontals and verticals are used and there is no overlapping, shading or difference in sizes. The re-emphasis on the surface by contemporary "flat" painting bears out its essential character in creative work. The emotion-tension appears to be closely tied up with the shifting and opposition of the forms on the surface of the canvas. The shifting of the forms actually controls the direction of the emotion-tension: it is the most forceful element with which the artist works. This does not mean that space does not function in this emotion-tension, but rather that it is created as an adjunct more spontaneously felt than intellectually realized—while painting. After placing two or more forms on a canvas, under a high emotion-tension, the artist must often step back to see how the forms relate in space: that is, adjust himself to seeing the over-all relations.

Since deep space is an illusion on the canvas, the more the third dimension is exaggerated, the less does deep space participate in the forces exerted by the planes. That is, when space becomes extremely deep it is no longer experienced as part of a plane relationship. The illusory aspects of three-dimensional painting become so apparent that the space does not function as part of the emotion-

tension. This does not mean that the representation of deep space has no place in a painting. Such representation serves, often, to add an atmospheric and realistic depth effect to a canvas. But exaggerated space unrelated to the surface of the canvas does not enter into the experience of spatial force as directly as space which is shallow and is closely a part of the immediate planear organization. Space which is a part of the organization of the planes contains force; otherwise it is merely spatial representation. (While looking at Paul Cézanne's painting of *The Sainte Victoire,* figure 18, disassociate the very great realistic depth that is represented and think in terms of the planear relationships of space in a more shallow depth, figure 19.)

A difference exists between paintings which appear to be flat and those which contain representational space. But this difference does not affect the creative basis of painting. Flat painting serves to call attention to the essentials of creative painting. In a realistic painting we imagine three-dimensional space by identifying the scene with nature. And even in the early stages of an abstract painting, each plane may have some connotation of depth in the mind of the artist. The important distinction to make is between that feeling of space which is a part of the creation of forces in the canvas and that space which depends merely on recognition for its existence. Through such a difference a true experience both of space and creative painting will become apparent. Many creative paintings, apparently flat at first impression, create spatial relationship. But it is a space that is not dependent merely upon perceptual three-dimensional form, but rather on the spatial perspectives of lines and forms themselves. While in apparently flat paintings one can experience strong spatial relationship,

a painting which contains realistic space may merely produce space, but not create it: the two-dimensional emotion-tension relationships which are fundamental have not in such a case been created.

Many old masters were as aware of the difference between representational space and created space as are the modern painters. We need only examine some of the structural factors in the work of the old masters to realize their understanding of the spatial organization of planes. So called "rhythmic" linear patterns that interconnect various edges of forms, or connect color or value patterns that flow over realistic forms in various depths in space, function as planes that create surface and space oppositions, diagram 54 (connecting edges of forms and planes that oppose each other have been emphasized). Figure 45, *The Annunciation,* by Roger van der Weyden illustrates how forms may be grouped creating a "design" line connecting two forms and functioning as a spatial plane in opposition to another plane, created by the arm of the figure on the right of the picture. Compare this spatial opposition to the others in modern

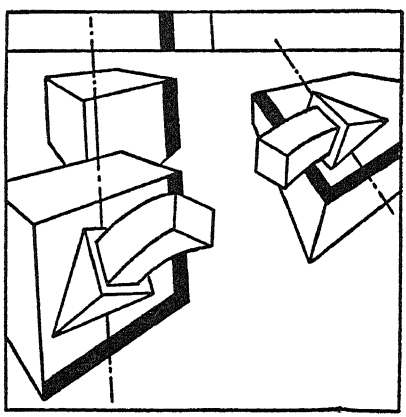


DIAGRAM 54. The planear three-dimensional space structure of a picture may vary greatly from the realistic three-dimensional space representation; it is largely through the planear space organization of a picture that experiencing of spatial tension forces takes place.

paintings and old masters illustrated in this book in order to see how both work with the same tools even if with different subject matter.

The relative clarity of three-dimensional realistic representation does not affect the strength of the emotion-tension. In other words, a picture can be realistic, as the El Greco, or very flat in appearance, as in many modern works, and still the emotion-tension will be there.

The artist may be unaware that he creates a two-dimensional balance from three-dimensional movement—he may think in terms of perspective, but feels in terms of intense balance of forms. But when he becomes aware that the elements with which he creates this perspective function in space apart from perceptual experience of realistic depth, then spatial balance becomes clear. For example, the line which forms one element of a deeply receding surface in perspective *may be experienced apart from this realistic perceptual experience* in an entirely new space relationship with other lines. When this dissociation is made, the line may even slant in a shallow depth in the opposite direction from its realistic position, or it may be felt to be in the same space direction as its realistic position, but as part of a plane that does not go deeply into depth, and functions as a plane in an abstract relationship, diagram 54.

There are two ways in which to consider space organization: 1) As the production of space by perspective, that is, the production of "deep" space; and 2) space that is worked with more freely, closely associated with planear organization and the canvas surface. In this case space is "shallow."

Realistic space may or may not be organized into movements into and out of the depth. When the space is not organized, as in the case of a landscape that recedes into

great depth, the elements composing the scene are conceived independently of this realistic space. In those pictures where the realistic space is organized and fixed, a painting may be dominated in its space effect by optics. For example, realistic depth, foreshortening and perspective dominate the space representation in the picture. In this case, on the other hand, a painting may be dominantly free in its space organization. When it is dominantly fixed, the forms such as perspective lines in the architecture, or deep space in a landscape are dominant. In paintings where the space is more freely organized, groups of forms are intertwined, and the intertwining dominates the rigid fixing of the space, as in the work of El Greco. The more the space is fixed the more the planes have to be dissociated from the depth; and the less they are fixed the more often they function as part of the space organization.

In summary, it can be said that while forms can be placed in the canvas by (1) free realistic organization, (2) a fixed space organization as well as (3) a felt space organization as in "flat" painting, the space needs to be related and visualized in terms of felt surface movements, often independent of the perceptual space, and in the closest association with a strong emotional force experience.

Piet Mondrian has attempted to establish the two-dimensional nature of the surface directly. The space he has created in his pictures is brought back very emphatically to the flatness of the canvas, so much so, that the nature of the space is not easily discerned; it is created by such subtle means as plane shifting, differences in thickness of line and overlapping done very flatly. In one of his late paintings, *New York City,* figure 24, horizontal and vertical bands are woven in and out; where they cross each other there

is a slight sense of depth. (We differentiate between a sense of space resulting from highly active planes on the surface of the canvas and a three-dimensional realistic space. The planes have no thickness or depth, but because of the vitality of their relation, seem to move against each other in two dimensions.)

Adolph Hildebrand in *The Problem of Form* emphasizes the nature of the two-dimensional balance of forms in space when he speaks of the importance of a sculpture being seen as a resolved composition, from any one point of view; when writing about a back and front plane, he brings to attention the importance of resolving this space composition within a limited depth. (Incidentally his idea of a front and back plane is reminiscent of the sixteenth century Renaissance artists' solution to the organization of space.)

We have to look at realistic painting in such a way as to experience the relation between realistic space and two-dimensionality. In order to do this we often have to dissociate the obvious realistic space from that produced by the space associated with planes in shallow depth.

Relating surface and depth is a result of the opposition of forms. To insist, as many do, that the key to space organization is to be found in the optical illusion of receding planes is to impose artificially what sometimes comes creatively as a final result. Some modern painters have built their work on a concept of space in which background and foreground are constantly changing roles; this theory is worth exploring, but it becomes a mechanical oversimplification if considered as an end in itself.

In organizing space the artist creates a two-dimensional balance out of three-dimensional movement by balancing

the in and out movements in his canvas. He does this quite often intuitively. For example, where he strongly experiences the placement of forms on the canvas, at a particular spot of the canvas, not only the balancing of his surface is involved, but spatial balancing as well. In balancing forms on the surface, a spot of color may be painted on approximately the spot where the artist feels his canvas is balanced; but where he feels space balance, the placement of that equilibrium is fundamental in the creation of spatial force movement. Spatial equilibrium is the result of the re-creation of the two-dimensional nature of the surface. This means that the outward movements are balanced by the inward movements in the canvas. This two-dimensional equilibrium corresponds to the flatness of the surface of the canvas. When planes are put on a canvas, the surface is broken. The two-dimensional balance of spatial forces re-creates the original balance of the blank canvas.

The dynamic spatial balance of movements can be compared with the balancing movements of the human being. When he walks his left foot is forward while his right hand is forward, each balancing the other. When he kicks a ball his arms and legs as well as his body move in rhythmic, opposite, integrated and balanced movements.

As the artist works he keeps his picture balanced; his reactions to the picture as it develops and his impulses to add to and change it take account of this balancing process. This balancing process goes on two- and three-dimensionally.

When the artist places forms on his canvas he feels himself into their relationship through his body reactions. He actively participates in the relating of the forms. (The spectator must do likewise in order to re-experience the

felt relations of forms in a canvas.) When the artist relates two forms on the canvas he not only feels their surface opposition, but at the same time experiences space directions; he experiences one form exerting a force forward and the second form backward. The two forms not only are experienced as space forces, but they seem to revolve about an imaginary point in space. Several planes distributed over the canvas can revolve about a point in one direction while other planes revolve the other way, opposing and balancing the first plane. Individual planes, groups of planes or interspersed planes function this way.

As the artist works, feeling that one form comes forward in relation to another going back, a third form is felt to balance this space movement by reversing the movement of one of the planes; that is, by creating a new relationship with one of the forms, its space movement becomes reversed, diagram 55. Therefore one of the planes moves forward in one relationship but back in another relationship. These opposing push and pull movements balance each other and create a two-dimensional balance; they re-create, figuratively speaking, the surface of the canvas.

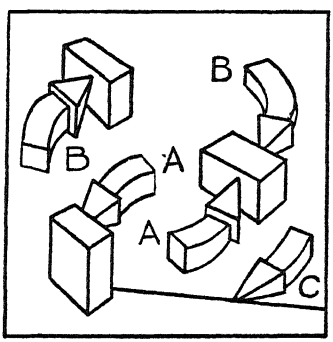
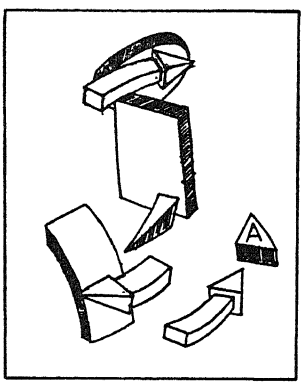
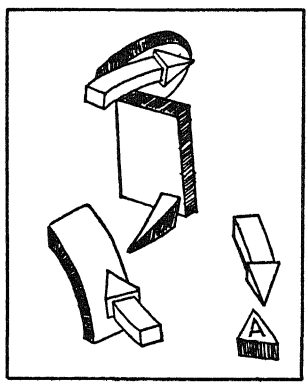


DIAGRAM 55. One form may function in two or more opposing volume movements.

Planes that function as a group can be called complexes, even though more often the word complex is applied to mean planes grouped in close proximity. The planes creating a movement of space in one direction about an imaginary point are also considered to create volume movements, for the space that they direct consists of a volume of space. Such volume may be thought of as revolving about an imaginary axis, as well as about a point in space. This is also true where large numbers of planes are distributed over a wide area of the canvas, and, though separated, numbers of these are considered as complexes, for they move in unison about an axis or about a point in space.

One plane may create two opposing volume movements, when related to two different planes, creating a two-dimensional balance. These two volume movements can balance each other. Diagram 55 illustrates how forms can oppose each other; arrows A oppose each other and in turn are

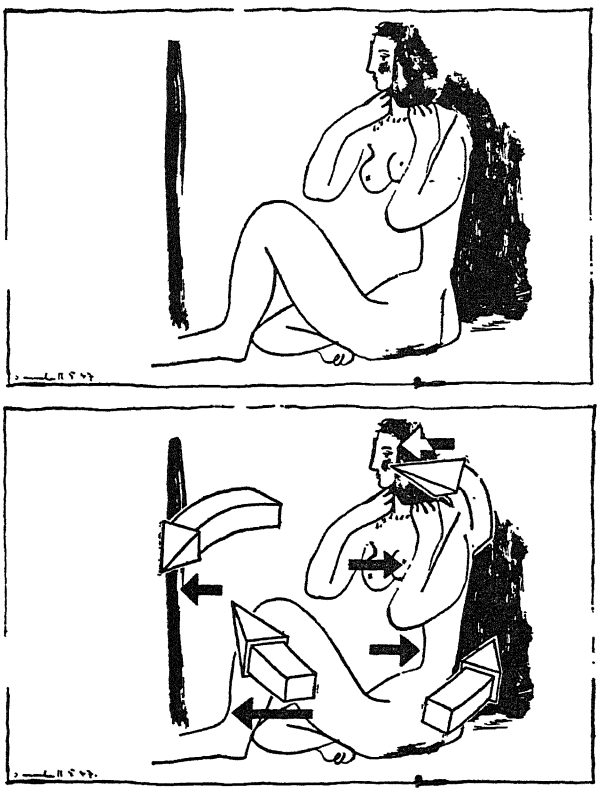




DIAGRAMS 56, 57. To visualize spatial *relationships* of one form to another, lower the right side of El Greco's *Portrait of a Man*, figure 31; forget realism and simply lower the triangular fur collar on the right shoulder, form A, diagram 56 and note the changes in spatial movements that occur; one change is indicated in diagram 57.

opposed by arrows B, with arrow C creating still another opposition. These arrows are meant to indicate felt forces and are so used in painting analyses where felt tensions are actually created. As an example of how the change in the placement of a form in a picture may influence the spatial movements of a painting, consider the change in movements that are possible when form A in diagrams 56 and 57 is changed, comparing these diagrams with figures 31-33.

Certain planes interspersed may form a dominant space movement in one direction, while others will oppose the



(ABOVE, Pablo Picasso: *Seated Woman.* (BELOW) Diagram 58. Each line and area, each distortion of the figure has been creatively made to express the artist's feeling for the image and its pictorial form relationship.

movement. There is no one way of determining these movements, except through feeling. They may be in and out movements. The extent to which they balance each other is a felt experience. The more intensely the emotion-tension is felt, the more dynamic are these movements created, the more sensitive is their balance. There are innumerable ways of creating these opposed volume movements; and when the artist works he often creates them unconsciously.

The creation of opposing space forces is illustrated in diagram 58, which analyzes Pablo Picasso's lithograph drawing of a seated woman. The black area to the right of the figure creates a plane directing the space in at the right. Where the black cuts across the side of the head, at the top, space is directed toward the left and forward. The background at the left of the figure is directed forward by the vertical line counterbalancing the movement in at the right, both movements together creating a counterclockwise volume movement around the figure. Counterbalancing this volume movement is the area of the legs forming a triangle which has been pulled strongly to the left, creating an emotion-tension surface movement in opposition to the torso directing the space in. Note how surface movements have been created by shifting various parts of the figure apart, for example, the line representing the stomach of the figure. Notice how the arms form a rectangular plane at an angle in space, within which the arms themselves create counter movements, the whole developing a surface movement to the right in opposition to the legs.

There are often two dominant opposing volume movements composed of numerous minor ones. But some paintings have three or more major opposing volume movements which balance each other to recreate the two-dimensional

picture plane! There are often so many planes in a painting and so many volume movements, each dependent upon the next, as to be more easily experienced than diagrammed. Where spatial diagrams of paintings are made in this book, over-simplification is often necessary in order to illustrate the space movements.

The emotion-tension direction of planes, their shifting, as well as the linear movements which help to guide and intensify their visual activity, along with the space defined in the picture help direct the space movements in a canvas. But the exact way in which the spatial movements function in any one composition cannot be determined by rule of thumb, for the combination of space movements varies with each new set of relations established in a painting and is as varied and imaginative as there are paintings. The spectator goes on discovering the balancing of the pulls and pushes in the canvas; the artist who created them, often does likewise, after he creates them.

In speaking of spatial balance and the recreation of the surface of the canvas, two types of surfaces and their likenesses and differences must be noted. There is the canvas surface itself, and there is a second surface within the picture itself, formed by either the alignment of the nearest forms into an imaginary plane or by the relationship of forms in opposition balancing one another to create a felt medial plane somewhere within the picture between the far and near forms. Overlapping transparent planes, emphasis on pigment, juxtaposition of spots of colors, as in the work of Seurat, figure 7, will emphasize the canvas surface. While spatial balancing can create a felt plane within the canvas itself—and this is the more obvious aspect of spatial balancing—it also becomes, in feeling, one with the surface.

The background of the picture, the forms in depth, and the forms in the foreground are held by their tension relationships (this occurs two-dimensionally) on the surface. It was pointed out earlier that space is an illusion, in the picture, and space-force grows out of the felt opposition of forms on the surface, combined with space directions. While in a sense, there is what would appear to be a second imaginary surface in the canvas, this, in feeling, is so much a part of the felt surface relations as to become one with it, in feeling. Sheldon Cheney, in *Expressionism in Art*, acknowledges the creation of a two-dimensional balance within the canvas, though without showing how much a part of the surface of the picture spatial equilibrium is; nor distinguishing between a perceptual visual experience and a felt one:

"When artists insist that the flat must be respected, the picture field never violated, they do not mean that the observer's eye is to be held in the front plane. No power on earth can keep the picture from being three-dimensional in effect, once the first line is drawn or color-plane applied. The observer's eye inevitably pushes in, and stays in (if the design is truly organic). The crux of the matter, it seems to me, is that a focal plane be established. . . . Too often, I think, when the main picture plane is mentioned, meaning the front plane, and the idea of recession and advance is added, the student tries to visualize the movement as to and from the actual canvas. But obviously any movement forward from there would bring the object out of the picture. It is rather what I term the focal plane which affords the *mean* of movement backward and forward." (p. 279)

Actually it is not a question of forms protruding out of the canvas, or of a mean plane being created somewhere in

the depth of the picture—except if the most obvious aspects of the resolution of three-dimensional space equilibrium are characterized, i.e., when space is dominantly based on perspective and chiaroscuro, and when forms are quite freely and creatively distributed in the realistic representation of space, a mean balance of movements and a mean focal plane would seem to be created in feeling. But in so characterizing spatial equilibrium the elemental felt surface oppositions responsible for the spatial movements themselves are ignored. Two-dimensional equilibrium has to do with the feeling of the individual responding to the pushes and pulls in the canvas as a whole while taking account of all factors comprising spatial balance in a painting, and not failing to account for the fundamental tension oppositions on the surface of the picture.

The creation of a two-dimensional surface balance discussed here seems reminiscent of the imaginary frontal plane, or flattening out effect of a painting as in the case of Michelangelo, during the High Renaissance. This is not, however, what is meant by spatial balancing in this book. Spatial balance does not necessarily require the deliberate creation of a frontal or mean plane. The Renaissance artist, to some extent, used such a technique as a unifying force to bring the spatial elements into architectonic relationship to the surface of the canvas, in order to *help* overcome perceptual visual experience. The modern artist, being freed of the limitations of perceptual vision, no longer depending on chiaroscuro, does not need such techniques to organize three-dimensional space.

CHAPTER NINE

Color

Of all the design elements with which the artist works, perhaps color has the greatest emotional impact on the spectator. Color seems to strike man more directly than line or texture or shape. Color has been used to symbolize all emotions; it appears on the flags that lead men into battle and on ribbons decorating heroes. While all of the design elements have elemental powers of their own, color seems to reach man's innermost reactions most quickly.

To the art student, color at once seems the easiest aspect of painting to understand, and yet the most difficult. It seems easy to understand because it lends itself very readily to scientific regulation; the number of color harmony theories, charts, color notations testifies to this. Yet the role of color in painting is difficult to understand because only

as it functions emotionally in a composition does its creative meaning become clear.

Color reflects so intimately, directly and subtly the innermost feelings of the artist that no system for control of all of the unending relationships that color creates is possible if a free access to these feelings is desired. We can speak of light or sombre color effects in a painting, of the vibrancy and saturation of color, of contrast and harmony of color, of all of the natural properties of color separately or in combination, but we cannot really systematize its use any more than we can systematize line and shape relations, in creative painting, if by creative painting we mean the vital and intense expression of the individual artist. Those who seek a short cut will find that color can only be understood in terms of free expression based on the fact that a colored plane is controlled the same as one of the factors in painting described so far in this book, adding to movement relationship by contrast or harmony, to the emotional content of the whole through the personal expression of the artist, supporting new understandings of surface relationships as opposed to chiaroscuro relations, supporting and creating mood in a subtle manner, which the use of black and white cannot equal. In the past, colors, have had various meanings, and different color preferences have been established. Red represented courage; blue symbolized immortality; yellow, treason; green, growth; purple, royalty; white, innocence; black, terror. Today, colors have different meanings. Color is used to express the artist's feelings and moods regardless, often, what the color of an object actually is. There may be a red sky and a blue tree in his painting. One need only notice the free use of color in advertising and other fields to see a greater use of color for its own

qualities. And in painting, too, these associations are becoming less important. The sensitivity with which a red and a blue are combined is often more important than what the red and blue represent either realistically or symbolically. A portrait of a musician may convey through sharp color contrasts a staccato effect of the music being played.

The source of color is light, which is made up of different wave lengths, moving at different frequencies. White light is composed of all of the rays, and a colored light is made up of one of the wave lengths found in white light. Color is seen either as light reflected from a surface (pigment) or as light coming directly from a source of illumination (light). There are characteristics peculiar to each. For example, the three primary colors of pigment from which all other colors can be mixed, are red, blue and yellow; while those of light are red, blue and green. (Mixture of pigment primaries produces gray. This mixture should theoretically produce black but does not because of pigment color impurities.) The light primaries, when mixed, produce white. All mixtures of pigments absorb more light than do primaries separately, reducing the total intensity of the light reflected from the surface. But when colored lights are overlapped on a screen, each color adds to the intensity of the next.

Hue, value and intensity are the three qualities which define color. Hue refers to the color itself; blue, for instance, is a different hue from red. Value refers to the lightness and darkness of a hue: the darker a color the deeper its value, the lighter, the less its value. Intensity, which is also referred to as the chroma of a color, is its degree of brilliance; yellow is a more brilliant color than blue.

Colors are affected in intensity, as well as in hue and

value, by surrounding colors. For example, a color will appear lighter on a dark background. Colors will tend to shift toward the complementary of their backgrounds. (A complementary color in pigment is one of two colors which when combined, produce gray. Such colors are directly opposite each other on a color wheel.) A light tint of a color appears stronger against a medium gray than against a strong intensity of its own color. The emphasis or carrying power of a color depends on its surrounding colors. Black on yellow, or red on white are more clearly seen than black on gray, or red on orange. This carrying power is affected by the contrasts of value, hue and intensity. Two colors of equal intensity will affect each other less than if one of them were more brilliant.

The three components of color—hue, value and intensity—are combined in different color systems to establish various harmonious or contrasting effects. Ostwald spoke of eight basic hues in his color harmony system, Newton of seven, Goethe and Schopenhauer of six, and Munsell of ten. In Munsell's system the color wheel shows ten equal steps comprised of yellow, green-yellow, green, blue-green, blue, purple-blue, purple, red-purple, red, and yellow-red. In this system, purple-blue is the complement of yellow, and blue-green is the complement of red. In the Ostwald system, blue is the complement of yellow, and green is opposite red, while in the Goethe system red-blue is the complement of yellow.

The most harmonious colors are those adjacent to each other on the color wheel, while the complementary colors—most contrasting—lie opposite. Color harmonies are referred to as "analagous" (neighboring) hues on the wheel, and

"triadic colors," which are found at the angles of any triangle with two equal sides placed within the color wheel.

Elaborate systems combining not only analagous and triadic color harmonies, but various values and intensities of the hues forming the color combinations, have been developed. They serve for the most part as elaborate crutches for the mechanical production of art work. Only in the hands of a sensitive artist do they serve a creative purpose, and then toward understanding, rather than creating combinations of color. The sensitive artist, more often than not, finds that such systems interfere with his free and expressive use of color. Even in the fields of applied and industrial art the use of color systems in place of sensitive selections and combinations of color can produce uninteresting, static work; for the quantity of a color in combination with others, the design in which it is being used, the material and texture with which it is used, the functions it serves, the form of which it is a part, the lighting condition under which it is seen, all contribute to the effectiveness of color design.

The creative artists of the past who were limited in the colors they could use by restrictions placed on them by their patrons, or by the artistic aims of a particular period in history, used color creatively in spite of the limitations imposed upon them by circumstance. The same is true of the limitations imposed upon the worker in the applied arts. The variety of color combinations is almost endless. To exploit this richness the artist depends upon his own sensibilities. There are very creative paintings which violate all kinds of color theories.

Which is the right color scheme to use for a painting? One might as well ask which is the right composition to use. Each person expresses himself through a combination of

colors that reflects his personality. Expression is individual and unique; there is no formula for its production. There are, however, general considerations about the use of color that will increase its usefulness for creative work. Knowledge of the nature of color will help to exploit its potentialities both in its use and in its appreciation.

In any case, the artist works from within; his ideas and feelings seek expression, and such expression makes the vitality of his work. ". . . I go for a walk in the forest of Fontainebleau. I get 'green'-indigestion. I must get rid of this sensation into a picture. Green rules it. A painter paints to unload himself of feelings and visions." (Pablo Picasso.)

Each variation of color is a plane, and as such is related two- and three-dimensionally in the canvas. The relating of color planes is governed by the creative laws mentioned previously. While color can create such effects as warmth or coolness, cheerfulness or sadness, these have but limited value in themselves in a painting. Through the creative relations of planes of color rather than through the attributes of color alone, color becomes significant in a painting.

Colors produce spatial effects. For example, red on a surface appears to advance and blue to recede. This results from the change in the thickness of the lens of the eye in reaction to these colors. To base the use of color in painting on these spatial effects is to disregard more important spatial and compositional considerations in favor of an optical illusion. Red, in positional arrangement with other colors can create a movement into depth, while blue can create a movement forward—movements directly contrary to the usual optical effects of these colors. The fact that color does have receding and advancing characteristics makes it doubly active on the canvas.

"Drawing and color are not separate. . . . During the process of painting one draws." This statement by Cézanne summarizes one of the characteristic ways in which color is organized. The artist does not merely first draw his forms and then fill them in with color. This does not mean that drawings are not made first, but rather these forms are subject to color condition and are changed. Neither is it a question of building planes of color to form three-dimensional objects; nor an effort to draw the form in color, or describe it through complementary dots of color or through translucent effects by the use of glazes. When Cézanne says that "drawing and color are not separate," and then goes on to emphasize that "during the process of painting one draws," he implies that color is based on those drawn relationships which create form. This does not mean that color is subordinate to drawing, but that color is an absolutely integral part of the relating of form, influencing it, helping to define it, according to its own dynamic effects. Only operationally does its role in painting become clear. Color, on the other hand, does not supersede compositional form considerations. It rather becomes one with emotion-tension and space relationships felt by the artist when relating forms on the canvas. Painting based on the use of color alone without regard for a strong composition results in a weak picture, as so clearly illustrated by the work of the impressionists.

Color may function as a part of a clearly defined form, as in the case of the later cubist work emphasizing the two-dimensional aspects of the canvas, or as a loosely shaped spot which includes chiaroscuro and perceptual depth. While this appears at first to be somewhat an arbitrary distinction, it indicates nevertheless a difference in the technique as well as the understanding of the use of color. The

latter method of using color is more characteristic of the Renaissance spotting of color intermeshed with light and dark than it is of modern painting, where the possibilities of color differentiation are more completely exploited.

The Renaissance painters used color along with a tonal and atmospheric three-dimensional space representation. The effect of the whole picture was that of light and dark; modeling of form was through gradations in value and shadows. Space became lost in pockets of darkness. It was with the impressionists that a sustained and deliberate effort was made to use color as something active in itself. Darkness, shadows and modeling through light and dark were eliminated.

The modern artist is substituting distinct, clearly defined color planes, and juxtaposing pure colors. There is a return to the vibrancy of the picture plane itself, rather than an infinite disappearance into depth.

Today color is used more for its own sake in painting. Different hues are placed nearby to strengthen each other. Contrasting colors are used adjacent to each other.

It is this use of pure color that Mondrian emphasizes: color to intensify its own potentialities.

In the actual use of color by the artist the variety of combinations are endless. What modern color does, first of all, is to add a greater number of potential color relationships.

Color can help direct movement. A brilliant red surrounded by subdued colors is emphasized. Its placement will therefore direct the shifting movement in the part of the canvas in which it is placed.

Color does not always function fully in a painting until it is first conceived as planes in space. It is through its role

in the spatial organization of the painting that color is controlled. The feeling one has that a plane moves against another or recedes or comes forward, will often decide the value, hue and intensity of its color.

Of course, color itself will have a voice in its placement. In the same way that the important principles of design influence the artist to change his composition, a color will enter into design considerations.

In the general organization of his painting the artist may first follow his feelings in placing his color, distributing it wherever his imagination and impulses direct him. "While it [a picture] is being done it changes as one's thoughts change. . . . At the actual time that I am painting a picture I may think of white and put down white. But I can't go on working all the time thinking of white and painting it. Colors, like features, follow the changes of the emotions. You've seen the sketch I did for a picture with all the colors indicated on it. What is left of them? Certainly the white I thought of and the green I thought of are there in the pictures, but not in the places I intended, nor in the same quantities. Of course, you can paint pictures by matching up different parts of them so that they go quite nicely together, but they'll lack any kind of drama. . . . Actually you work with few colors. But they seem like a lot more when each one is in the right place." (Pablo Picasso.) As the artist's canvas progresses, he finds that it may have been broken into too many forms, and a center of interest has not been developed. He will seek to correct this fault. In order to simplify the number of forms and produce a center of interest, the artist will not simply eliminate forms and decide on a particular shape as the center of interest. The

creative process is not always quite so simple. The artist will seek a way to change his composition and still maintain those expressive qualities he has already created. If he does have a center of interest in his paintings which is a form perhaps too large and uninteresting, he may break this form; and each part may function emotionally with another form in his canvas and through it with other areas.

The use of color involves such factors as the need to interpolate a color into an area to liven it; the need to balance the picture better or to complete a linear movement or shape; to add greater intensity through the emphasis of movement in the canvas. Colors, because they are subject to the requirements of the emotion-tension and the relations of forms on the canvas, may not be placed in exactly the spot the artist may demand. (This is an example, again, of the conflict between emotion and idea. A time factor enters because the artist may have to wait until he adjusts other forms and colors to permit the desired color to be added, or he may have to wait for the moment he can "feel" the placement of the "compositionally" determined form. If the color is placed in the area at a time when it is not strongly experienced, the entire painting can be weakened, if not destroyed, and may have to be completely reconstructed.)

The exact value and intensity of the color as the painting proceeds—affecting the key of the painting—are determined by the artist's feeling. Intense color can not be added merely to a spot to increase its liveliness but it must also be experienced in relation to the whole composition. Too brilliant a color, when not so experienced, will pop out of the painting, just as an unrelated subdued color may fall through the back of the picture. It is through the feeling for

surface opposition—and spatial balance—that the surface is maintained.

The artist may feel a particular value or intensity of a color belongs in a certain part of a painting, and the failure to follow the emotional impulse may produce poster-like or muddy color. The greater the emotional intensity (which does not mean explosive catharsis, but a heightened inner tension), the greater is the sensitivity with which the colors are related.

The extent to which the physiological advancing and receding effect of colors enters into the artist's emotional intensity is debatable. If the visual effect supersedes the artist's emotional intensity, art becomes the servant of an easily obtained result, as devoid of strong emotion as the system that is used. The use of optical illusions only substitutes one factor—a minor one—for the larger creative experience. This does not mean that these optical illusions cannot be used, but they should not substitute for deep art experience. In any case, their potentialities are limited. The impressionists' system of allowing the eyes to mix spots of color was no stronger than the limitations the technique imposed. And similar optical systems continue, methods against which Cézanne rebelled in order to produce "something solid and durable, like the art of the museums."

No matter what the color on a canvas represents realistically, it must function as part of the composition of a painting. Vincent Van Gogh stated this when he wrote to his brother Theo: "I don't mind so much whether my color is exactly the same [as in nature] as long as it looks beautiful on my canvas, as beautiful as it looks in nature. . . . I am not working for myself alone, I believe in the absolute necessity for a new art of color, of design and of the artist's

life. . . ." Picasso talked about this same problem somewhat differently: "One should not proceed from painting to nature but from nature to painting. There is the painter who creates a yellow spot from the sun, but there is also the painter who with deliberation and skill turns a yellow spot into a sun." (*Deutsche Kunst und Dekoration,* Vol. 29, no. 11.) When working from a scene, the artist will select colors and relate them on his canvas to make them function in themselves. Juan Gris has succinctly summarized this when he stated: ". . . I compose with abstractions (colors) and I build an arrangement, when those colors have become objects."

In using color creatively the artist can intensify the quality of color in many ways: through saturation, contrast, through impasto or texture. Saturation signifies the full intensity the color can carry. In using color on the canvas the artist gets his fullest impact not through the intensity of a single color but through the relationship of several. "Give me the mud of the streets and if you will leave me also with the power to surround it to my taste I will make of it a woman's flesh of delicious tint." (Eugène Delacrois.) If the artist wants a bright red, he achieves this through relating green or some other color to it, which will intensify the red more than if bright red were used alone. The intensity of the color is strengthened by the size of the area it occupies, the position it holds on the canvas, its spatial relationship to other colors, the importance or strength of the movements it helps direct; color can help direct movement and movement can intensify color by helping direct the eye to it.

There are no limitations to the palette today. The artist does not limit himself to associative color, or realistic color. We associate blue with the sky, but if the artist feels red is

more expressive, he uses it. Furthermore, if the red is arrived at sensitively and is related to the other colors, it may even give us the feeling of sky—even of blueness—and the painting may have greater richness because of the use of an unexpected color harmony.

Color perhaps reflects the mood and temperament of the artist more than any other element in a painting. Certain types of color and color combination are often as characteristic of the artist as his handwriting. Selection of color seems to come from such deep sources within the person that it bears the stamp of the artist without his knowing it. The color interpretation of each artist will be different. One will use soft blues and bright reds, one will seem to have no difficulty in producing bright blues, but the reds will be dulled. One painting will be bright and clear; in another the color will be mellow, a third one muddy. The color ranges emphasized will often be characteristic. The color of such masters as Paul Cézanne, Auguste Renoir, Juan Gris, Joan Miro, Pablo Picasso, Henri Matisse, John Marin, is a developed emotional expression highly personal to each.

There is an association between quality of color and saturation; washed-out, murky colors are disagreeable; the very way the color is put on the canvas counts. When the brush is handled insensitively, the color suffers. The brush stroke can help direction of form. When we think of the evanescent quality of Cézanne's color, we realize that some part of it is due to the delicacy of his brush strokes. In his case it seems as though each brush stroke had been thought out before it was put down, as though he sought the most economical means of expression. Each separate color exists as a plane in space.

Impasto, texture and the contrast of "thin" and "heavy"

color, affect the quality of the color. The use of texture in modern art is extensive. Many artists achieve texture through the mixture of foreign substances with the paint. A finer texture can be produced through the mixture of pumice, coarse textures through the introduction of such substances as sand, coffee grounds, or metal and wood shavings. In the same way, many artists experiment with surfaces—some seeming to prefer a smooth hard surface such as a plaster board, others preferring a texture as coarse as burlap.

Each painting medium, water-color, gouache, oils, expresses a different quality of color. The artist does not use oils in the same way he uses water-color. Each medium dictates its own use, and the artist must experiment and exploit the qualities within the medium.

Subtle grays, blues and gray blues, may be produced through the mixture of many colors rather than through the addition of black and white. A subtle gray-blue may have in it elements of blue, red, a touch of green and yellow. The artist mixes his colors until he gets the exact tone he wishes. This building up of color makes for greater richness since a little of the quality of each color comes through. Through slight variations many yellows can be used; this gives a greater richness than if the area is painted one yellow. This experiment within each color can be very important to the artist, since it may add many colors to his palette which he would not have thought of using before. Cézanne breaks up color with very sensitive relationships; he finds many blues and greens to create a blue or green form. The slightest change in value and intensity makes possible a great subtlety in the range of colors.

Contrast of subtle colors and colors of high intensity is used to intensify the emotional expression. Intense color

will become richer if surrounded by subtle, even "muddy" tones, whereas subtle color may take on new richness and meaning with a few dashes of brilliant color.

The interpretation of the mood of the artist is closely tied up with his use of color, through the utilization of harsh or sharp colors, sombre colors, fresh bright colors, or more delicate nuances of color. Color can be lyrical, dramatic, subdued, voluptuous and fleshy, or "dry" in feeling, decorative and sweet, classic, or Baroque. As the artist works, he changes, destroys, seeking experimentally and creatively. He is looking for a complete statement, and finally produces a harmonious whole; each color takes its place in space and on the surface of his canvas; no color jumps out or falls unduly back into space. There is a balance on the surface, "heavy" colors balancing "lighter" ones, intense colors balancing dull colors, both through the comparative size of the areas involved, and through the compositional structure through which they exist.

Henri Matisse clearly summarizes the artist's concern with color functioning as an integral part of a painting as a whole, rather than merely as a part of a realistic object:

"If upon a white canvas I jot down some sensations of blue, or green, or red, every new brush stroke diminishes the importance of the preceding ones. Suppose I set out to paint an interior; I have before me a cupboard; it gives me a sensation of bright red—and I put down a red which satisfies me; immediately a relation is established between this red and the white of the canvas. If I put a green near the red, if I paint in a yellow floor, there must still be between this green, this yellow, and the white of the canvas a relation that will be satisfactory to me. But these several tones mutually weaken one another. It is necessary, there-

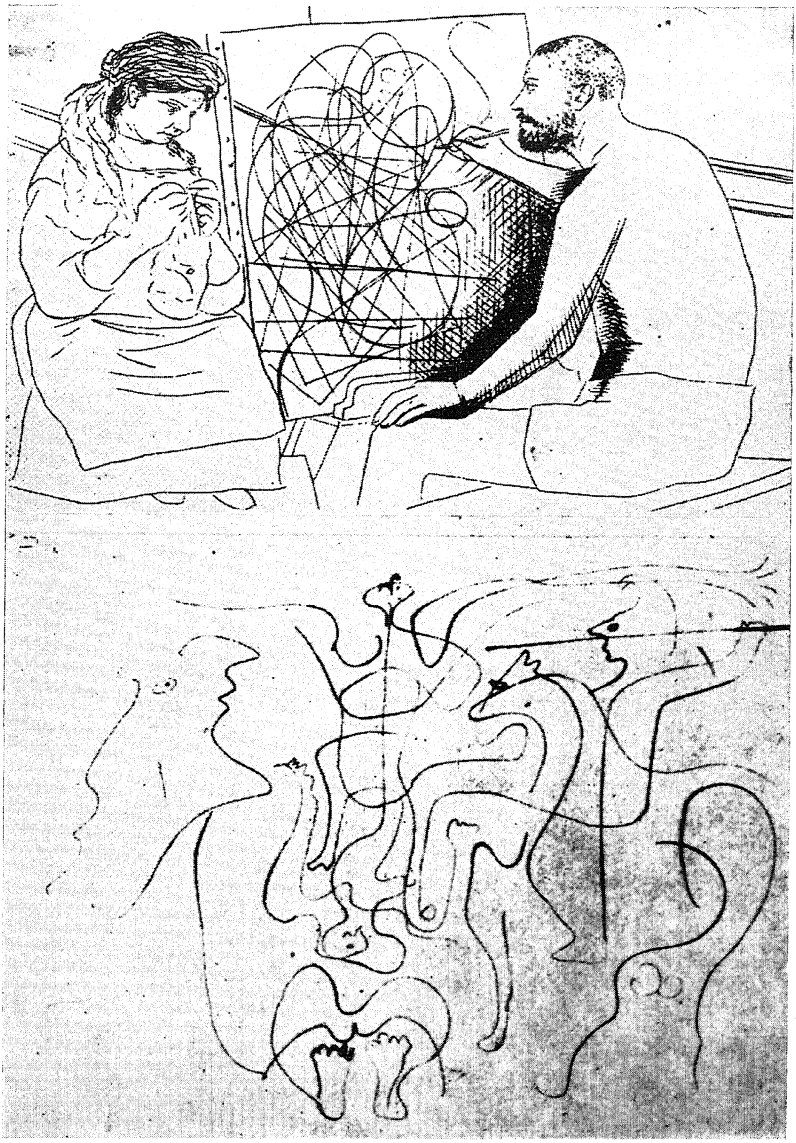


FIGURE 49 (top). Pablo Picasso: *Painter with Model Knitting*. Etching. (Collection The Museum of Modern Art, New York.)

FIGURE 50 (bottom). Pablo Picasso: *Crucifixion*. The artist expresses himself freely, spontaneously and automatically in line and shape.

FIGURE 51 (top). Titian: *A Group of Apostles. Pensiero for the Assunta.*

FIGURE 52 (lower left). Gianlorenzo Bernini: *Pensiero for the Statue of Truth.*

FIGURE 53 (lower right). Paul Klee: *The Marked One.* Titian used line very freely as he improvised on the realistic form. Bernini interrelated a realistic and abstract form, one growing out of the other. Klee has simplified a realistic form, subordinating it to an overall design; while Picasso, figures 50, 54, and 55, evolves shapes calligraphically.

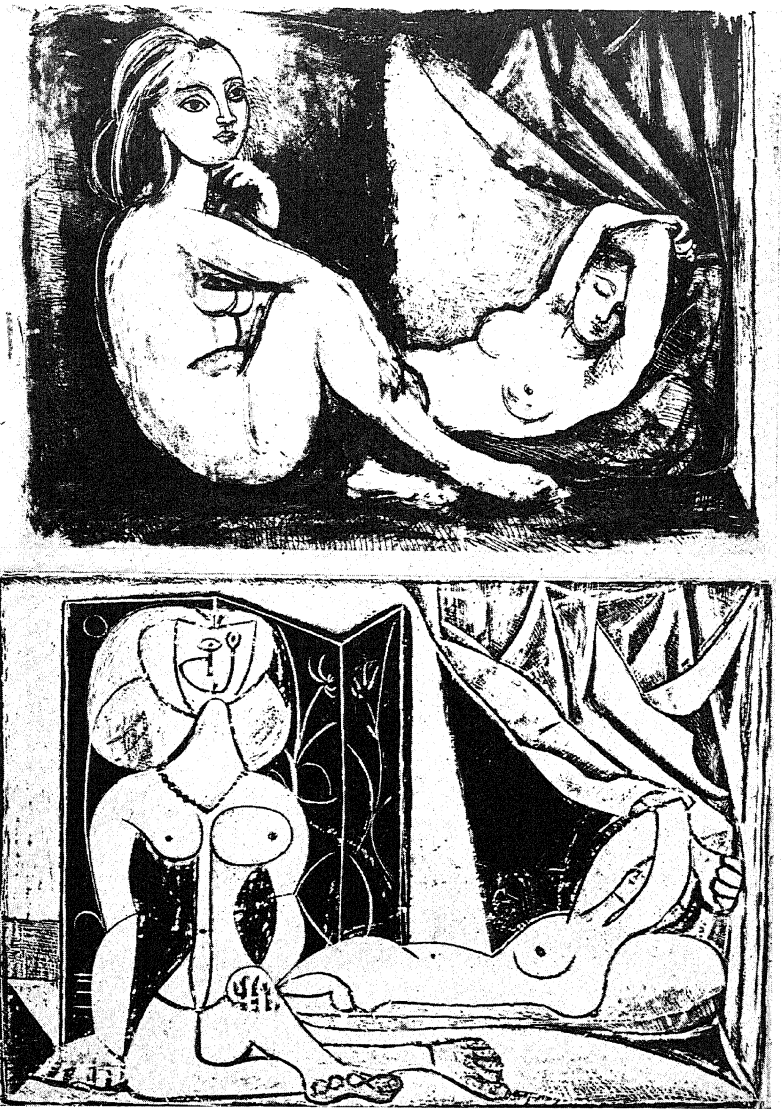
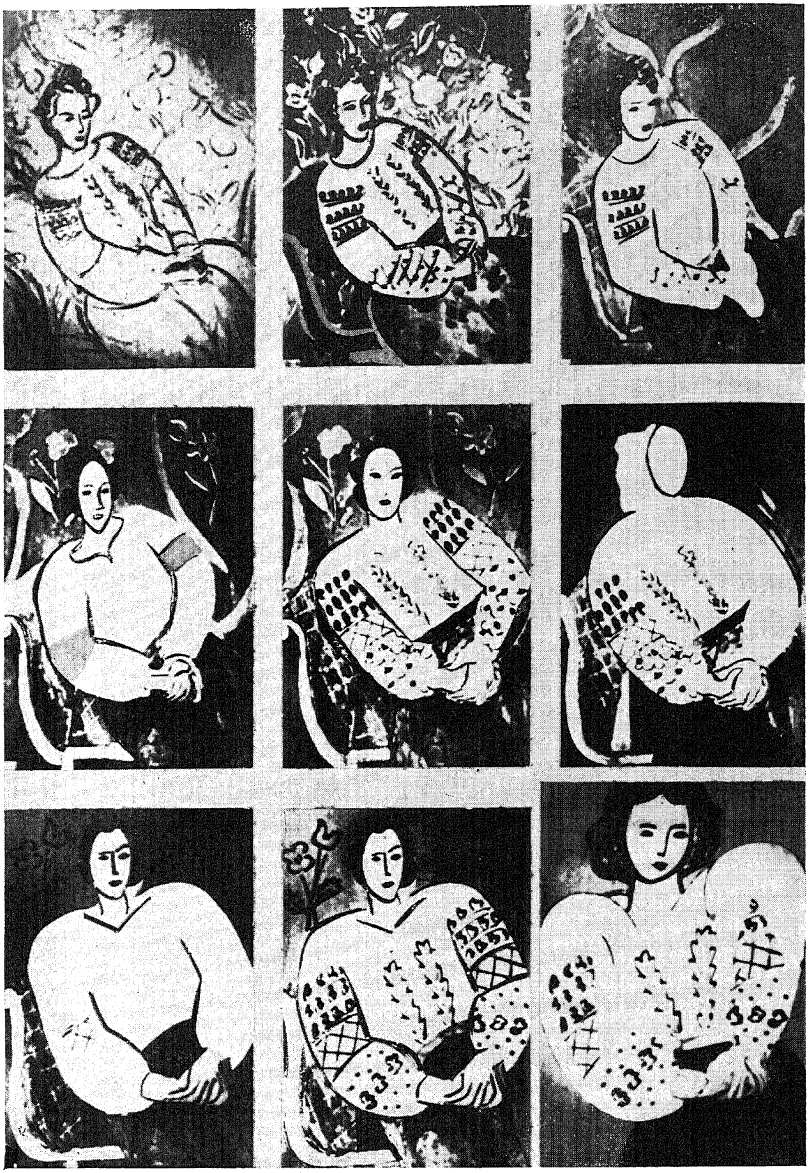


FIGURE 54 (top). Pablo Picasso: *Two Figures.* Lithograph. First Printing.

FIGURE 55 (bottom). Last printing after changes made on the same lithograph stone. Starting with realistic forms, Picasso changed this lithograph through a number of different stages until he had a drawing with a rather primitive and arabesque design and feeling.



FIGURES 56-64. Henri Matisse: *The Peasant Blouse.* The nine different stages (left to right) reproduced here were done between September 11, 1939 and April 23, 1940; they illustrate how the creative artist evolves, intensifies and crystallizes his work as he gains new insights.

FIGURE 65 (top). Domenico Ghirlandaio: *Pensiero for the Fresco of the Visitation.*

FIGURE 66 (bottom). Domenico Ghirlandaio: *Visitation.* We note how the old masters improvised and changed their work as it developed—some more than others—when we compare the changes between the sketch and final work on this page and the next; but these changes were always within realistic bounds.

FIGURE 67 (top). Filippo Lippi: *Pensiero for the Raising of Drusiana.*

FIGURE 68 (bottom). Filippo Lippi: *Raising of Drusiana.*

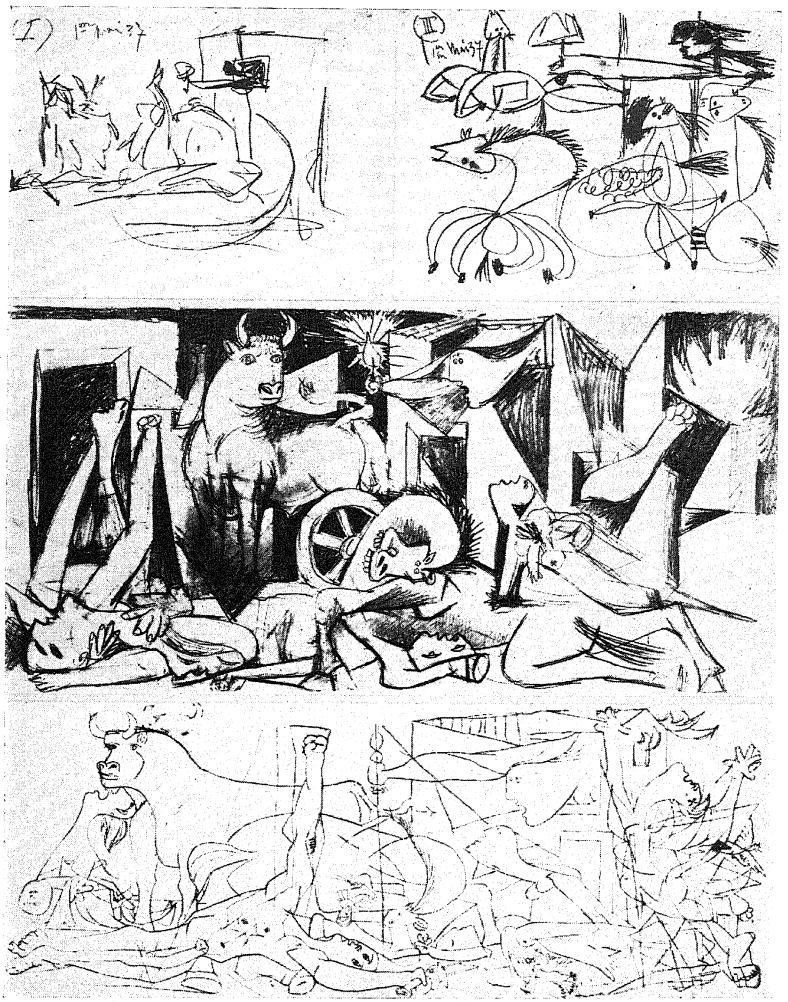


FIGURE 69 (left). Pablo Picasso: *Guernica—Composition Study I.* May 1, 1937.
FIGURE 70 (right). Pablo Picasso: *Guernica—Composition Study III.*
FIGURE 71 (second row). Pablo Picasso: *Guernica—Composition Study.* May 9.
FIGURE 72 (third row). Pablo Picasso: *Guernica, 1st state.* May 11.

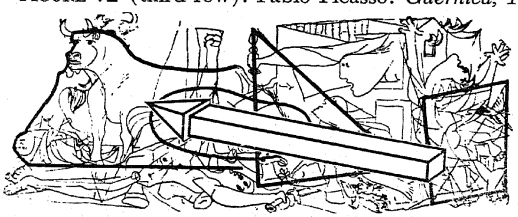


FIGURE 73 (bottom). Dominant spatial idea analyzed.

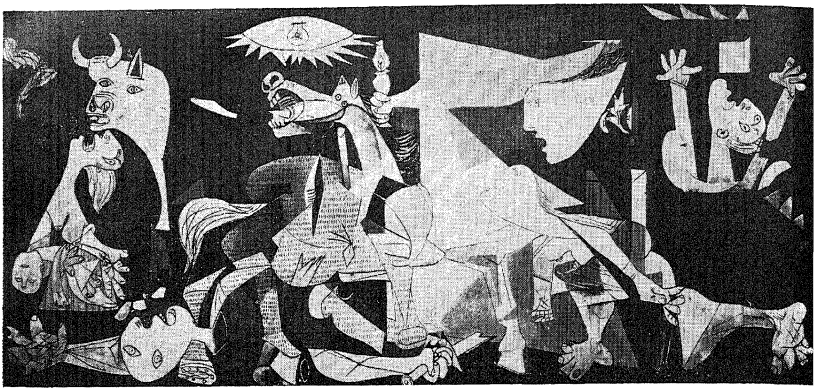
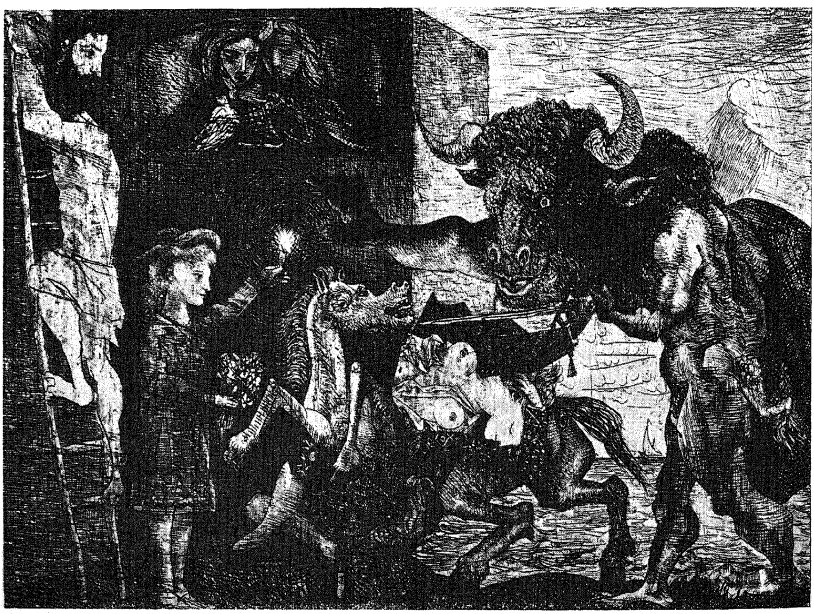


FIGURE 74 (top). Pablo Picasso: *Guernica,* Mural (complete). The head of the bull at the left, the screaming horse in the center, the dead warrior below, the head of a woman with outstretched arm, are symbols expressing the triumph of liberty and the Spanish Republic.

FIGURE 75 (bottom). Pablo Picasso: *Minotauromachy.* 1935. This etching expresses on one level the escapist and retrogressive forces in society, and on another level the conflict of physical, psychic and sexual forces with moral values in Spanish, or any, society.



fore, that the various elements that I use be so balanced that they do not destroy one another. To secure that, I have to put my ideas in order; the relationships between tones must be instituted in such a way that they are built up instead of being knocked down. A new *combination* of colors will succeed to the first one and will give the wholeness of my conception.

"I am forced to transpose until finally my picture may seem completely changed when, after successive modifica-

Henri Matisse: *Femme au Chapeau, 1944.* "What I am after above all is expression . . . the whole arrangement of my picture is expressive . . . composition is the art of arrangement in a decorative manner . . . for the expression of what the painter wants . . ."

tions, the red has succeeded the green as the dominant color. I cannot copy nature in a servile way, I must interpret nature and submit it to the spirit of the picture—when I have found the relationship of all the tones the result must be a living harmony of tones, a harmony not unlike that of musical composition . . .

"The chief aim of color should be to serve expression as well as possible. I put down colors without preconceived plan. If at the first step, and perhaps without being conscious of it, one tone has particularly pleased me, more often than not when the picture is finished I will notice that I have respected this tone while I have progressively altered and transformed the others. I discover the quality of colors in a purely instinctive way. To paint an autumn landscape I will not try to remember what colors suit this season. I will only be inspired by the sensation that the season gives me; the icy clearness of the clear blue sky will express the season just as well as the tonalities of the leaves. My sensation itself may vary, the autumn may be soft and warm like a protracted summer or quite cool with a cold sky and lemon yellow trees that give a chilly impression and announce winter.

"My choice of colors does not rest on any scientific theory; it is based on observation, on feeling, on the very nature of each experience. Inspired by certain pages of Delacroix, Signac is preoccupied by complementary colors, and the theoretical knowledge of them will lead him to use a certain tone in a certain place. I, on the other hand, merely try to find a color that will fit my sensation. There is an impelling proportion of tones that can induce me to change the shape of a figure or to transform my composition. Until I have achieved this proportion in all the parts of the com-

position I strive toward it and keep on working. Then a moment comes when every part has found its definite relationship, and from then on it would be impossible for me to add a stroke to my picture without having to paint it all over again." [1]

[1] *Notes d'un Peintre,* from which these extracts are taken, were first published in *La Grande Revue,* 1908.

CHAPTER TEN

How the Artist Works

MAN CREATES himself in his work. He tries to give expression to his innermost self. To do so, he needs a medium of communication. He can never recreate for another person exactly what he experiences; this is due not only to the different attitudes brought to bear on the work by the spectator, but to the fact that the interposing of a medium changes the exact nature of that experience. For example, all of the sensations accompanying a dream experience can never be really reconstructed for the next person. At best the artist can only reproduce a facsimile of his inner experiences and give them meaning and vitality through the laws governing the medium used for communication. Not all mediums lend themselves to the communication of the same type of experience; nor are all experiences a medium

is capable of communicating necessarily the most profound, though all are in the broadest sense, the substance for experiencing in art, and in a more limited sense, can be used dependent on how they are integrated with the laws of the art medium. The type of medium itself very strongly conditions the type of fusion that takes place, and the depth of the experience, the personality of the artist, and the times in which he works, influences, re-orders and determines the relative importance of the various elements comprising his art experience. Many artists working today feel that the experiences most directly and naturally a part of the medium of communication offer the most direct and powerful means of creating art, and therefore work non-objectively or abstractly, while others feel that the use of images offers the means for the deepest art experiencing.

One of the important problems of the artist is how to give the greatest vitality to what he wishes to say, so that his communication will live for the spectator as a profound and intense experience. What has been emphasized in this book are some of the more frequently neglected aspects of the forming process in the painting medium, especially that forming act based on bodily felt movement.

What we want to consider next are some of the more obvious aspects of the way the artist works. To do so we must keep in mind that what the artist does, when he recreates his ideas and feelings in a medium, is a forming process organizing expression.

The act of expressing means to make known one's thoughts and feelings through a medium; this medium may consist of colors on a canvas, spoken or written words, body movement as in the dance, speaking, acting and other means of communication. When we speak of the expression

of a work of art we mean that unique quality that is intuitively responded to before the mind decides on its nature, differentiating it from other art works. And when the artist expresses himself, it is those things within him before the giving out that comprise his expression. The unique expression of the artist communicated by his work cannot be really described but only responded to.

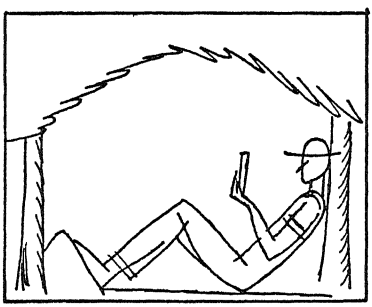
Expressive art is different from imitational art in that things that cannot be imitated can only be expressed: imitational art copies the outward aspect of forms, while expressive art reveals the forces by which the individual object and the universe as a whole is kept in movement and yet is held together. Creative expressive art recreates through a medium and through the sensibilities of the artist, and spectator, those cosmic forces that go to make up the world. A work of art becomes an extension on a smaller scale of these forces. When the artist manipulates lines and colors on a canvas he is forming their relationships by intuitive feelings, as well as with conscious ideas, and a consciousness of particular emotions. When creating relationships in his painting he intuitively creates form. This creative, "expressive" or "significant" form is felt rather than seen; it is form which is an elusive crystallization, vaguely recognizable, of the elements of a picture reacting on one another to create a vital integration, in a constant state of becoming, creating for the spectator the form and expression of a work.

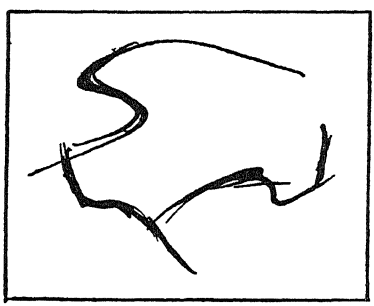
The artist may begin with the obvious elements of the expression itself, with the outward aspect of his feeling and ideas, in his work; this may consist, for example, of the spontaneous combination of line, texture, colors on a canvas; then he may proceed to organize these elements in accord

with the obvious aspects of the expression, about which he becomes clearer once he has projected them in a medium. On the other hand, he may subject his spontaneous impulses to feelings and ideas before they are put into a medium—thereby delaying his impulse. Whichever process he follows, he organizes his feelings and ideas in a medium; since the fusing and organizing of feeling and idea, and not a system of design, creates art, our attention must be focused on the natural methods of the creative artist.

Because spontaneous impulse and the designing of it are often intimately fused, any attempt to speak of method is extremely difficult. Moreover each artist works differently; our examination therefore must be general because it follows that there are no exact ways of working which every individual follows; each finds his own way of working.

To design is to organize feeling and idea, not merely the forms on a canvas: too often designing has been an em-





DIAGRAMS 59, 60. Organically felt and evolved relationships of lines and areas, rather than realistic relationships, express the artist most intimately and directly. Diagram 60 shows how artist can change the representational picture to get a different composition. The lines and planes of the trees, man, etc., serving as a stimulus, a point of departure, have been imaginatively related to introduce opposition of movement. Even in a realistic drawing, lines and planes can have an abstract, organic relationship.

phasis on how forms are combined rather than an emphasis on the forces that are being organized, of which the relationship of elements is but the outward means of communication. This difference is subtle, but very important. Design, then, is a forming of expression rather than a mold for it. Impulse, expression, feeling are given precedence, rather than the forming process.

The artist's process is both deliberate and impulsive. He may place forms on his canvas immediatedly, very spontaneously, or he may subject impulses and feelings of one type to those of another type, fusing both. Impulses may be delayed and subject to a planning idea.

Art is often said to defy explanation. Recently, through the findings of psychiatry and with the investigation of the creative act, some subconscious sources of art have been brought to light. That flash of insight into a problem which sometimes occurs, that intuitive impulse to put forms together in a certain way on a canvas, can be traced to a variety of sources, from semi-conscious impulses to subconscious automatism. (Organismic psychology has pointed out the fundamental role of the flash of insight in the very act of knowing.) Individual personalities enter into the individual's expression, and partly characteristic of it is a sort of expressive automatism. An artist can be aware of the impulses he receives and either follows them as the work proceeds or subjects them to ideas and in turn to a new automatic impulse. But it is characteristic of these impulses that they may seem to originate automatically as the artist works. This is quite consciously expressed, for example, through the types of design elements used, their combinations, and even the distortions of subject matter; or he may express a very personal world of his own in which the symbols

themselves may or may not be unclear to the artist. One can insist that the type of symbols selected, whether consciously or subconsciously, is based on subconscious impulses; yet a difference can be noted in the subconsciously-arrived-at symbols between those arrived at automatically and developed consciously and those that are arrived at subconsciously, the meaning of which the artist is not wholly aware. We must remember that the artist works out of creative necessity and that creative necessity can and will create both its own form and symbolism.

Doodles, which people often make while they are preoccupied, have been the subject of psychiatrist's investigations. These doodles have value in art, since they express subconscious experiences.

When an artist needs a form on a canvas, instead of making a mechanical shape as a circle or rectangle he can imaginatively manipulate shapes. The origin of these shapes may be very similar to that of an automatic doodle: there is a type of doodle which expresses a physical reaction to annoyance; while another type is produced during a relaxed state allowing for a freer play of imagination.

In using the doodle creatively, the artist must reach a balance between the conscious idea and the automatic drawing. The doodle is subject to the same idea of spatial organization, relationship of forms and two-dimensionality that we have discussed. The balance between the automatic drawing impulse and conscious drawing idea is delicate, with the automatic impulse often guiding the artistic projection.

Even though the preliminary planning of a composition can be creative and imaginative, it will not remain so if

the picture does not grow. Growing involves new impulses, rejections and improvements in the design.

For an illustration of how a composition grows creatively as the painting proceeds, look at the early stages of *Guernica*, figures 69-74 and the lithographs of *Two Figures*, figures 54 and 55, by Pablo Picasso, and the various stages in Henri Matisse's *The Peasant Blouse*, figures 56-64. Picasso was dissatisfied with his first drawings and changed them, bringing them nearer his creative needs. In *Guernica* we can see a very definite preconceived subject matter goal from the beginning. A painting may have an imagined concept of a realistic, symbolic or emotional nature toward which the artist directs his work, seeking to recreate in it his concept. The abstract artist also has an imagined concept which he tries to fulfill in his work, but it is one more concerned with emotional relationships of line, form and color than with realistic content; and while compositional problems, types of color and line relations, or emotional effects may direct the abstract work, quite often, if not usually, the larger imagined concept may consist of an emotional, intensely and creatively related composition of lines, forms and colors without any preconceived idea of what forms should be selected or how organized; the very freest evolvement of forms, and psychologically felt ideas, if they are used, is permitted. Regardless of the type of imagined concept, the point made in this book is that his painting grows imaginatively, changing and developing as the painting proceeds regardless of whether or not the aim, effect or context of the work is established at the beginning of the work. It is true that in some artists' work, the changes are not extensive, as we watch the work itself, even though the changes that we cannot see going on within the artist him-

self may be. But it is the point that there are changes, that there is an interactive relationship between the artist and his medium which is too often overlooked and in which we will find one of the keys to understanding the nature of his experience and his product, that this book is particularly concerned with.

We can contrast methods of approach by comparing Picasso with Ghirlandaio. In the drawing by Picasso, *Crucifixion*, figure 50, the shapes and the design developed as the work progressed. Here the line has become an element weaving in and out of space. The whole did not grow out of the relationships of isolated elements, but out of a free breaking up of space and areas of the canvas.

Domenico Ghirlandaio's *Pensiero for the Fresco of the Visitation*, figure 65, deals with individual objects, relating them to create the whole design. The relationships between forms are achieved more through overlapping, dominance and subordination of individual forms than through an emphasis on the interconnecting and rhythmic relations of design elements themselves. Compare this drawing with Titian's and Gianlorenzo Bernini's. In Titian's sketch, figure 51, of a group of apostles, some interconnecting design between forms is attempted by shading. Gianlorenzo Bernini's *Pensiero for the Statue of Truth*, figure 52, shows one form growing abstractly out of another, based on an interrelating of movements at conception.

To return to the *Visitation*: Ghirlandaio's finished fresco does not greatly differ from the sketch, that is, in regard to the overall design. The major displacement of forms in the finished work is reasonably well established in the sketch. Compare this with Pablo Picasso's and Henri Matisse's work between the conception and finished painting. Even when

Picasso had developed a full-size drawing on the mural as shown by the photograph of the mural at the start, figure 72, the drawing continued to change up until its final stage.

We can also compare Ghirlandaio's way of working with that of Filippo Lippi, whose finished work varies in the overall design from the sketches. The *Pensiero for the Raising of Drusiana* by Filippo Lippi, figure 67, varies in both background and foreground from the finished fresco. An entirely different disposition of buildings is noted, with the building with an arch in the center background of the picture in the sketch moved to the far right in the fresco and other buildings added at the end. While the grouping of the figures remains similar, their spatial disposition has changed: the group of figures at the left is no longer placed further forward in a plane parallel to those at the right. The diagonal direction of the figures has been reversed. The center of interest has also been simplified, with the figure to the left of the seated woman eliminated. And this seated figure with the bed on which she sits have been placed a good deal more parallel to the surface in the fresco, eliminating the earlier diagonal perspective movement.

We see in these examples varying degrees of change from the first sketch to the final work. In looking at works of the old masters we find "hidden" rhythmic lines running through the whole picture. It is true that Picasso lives at a time when he is able to base his forms on the very freest and imaginative manipulations of design elements, while the old masters needed to make certain concessions to established forms; and it is evidence of their greatness that they did this without loss to their imaginative vitality.

The emotional relationship with which we are concerned in this book is that dealing with the organization of formal

elements of picture construction. Creation of emotion-tension and improvised relationships through design elements, results in a very personal expression: intensely felt relationships of improvised design elements can free such expression. This apparently indirect method of dealing with expression, in reality taps deep sources within the person that often only intense feeling seems to release. It is a type of release dealing quite directly at the same time with the form problem in art. Improvisation takes account of the very freest manipulation of forms and colors, while the emotion-tension subjects it to the limitations of the medium of painting. There are of course other types of emotional relationships created in a picture, perhaps the most obvious of which is that dealing with the creation of a subject matter idea which may or may not grow out of very personal and deeply felt experiences, either actual or primarily psychic, from which the artist can draw tremendous emotional inspiration. Because this book deals primarily with how forms are related in abstract design elements—and how such designing in itself accounts for emotional intensity apart from subject matter representation—intense emotional relationships in a canvas referred to here, are those involving design elements. Art activity is integrated, and separation of subject matter from the design is not made arbitrarily. The point is that while the use of subject matter is an essential part of the creative experience of many artists, others find that such experience is incidental or unnecessary. Art is primarily an integrated activity of mind, feeling and body-response. The source of each person's inspiration is different, and what the spectator judges is whether the artist has been successful in communicating his experience through a medium. Does the work have vitality, sincerity

of expression and form? The distinction between works that do and those that do not have a definite representational idea in them, already exists today, and is not arbitrarily made here simply for the purpose of study. But, as was pointed out earlier, one of the distinctive factors of modern art has been the development of abstraction. This break from perceptual reality has given impetus to many of the present day expressive art forms. Whether the artist works abstractly, realistically, non-objectively or symbolically, the phases of emotional relation of form described in this book nevertheless operate. If the artist is deeply moved by subject matter, the problem of form cannot be neglected: it is simply that both the feeling for the subject matter and the relating of design elements operate together.

If you were to ask what the artist sees and feels when he paints a picture, the answer would be that an unimaginative artist sees the same things all the time, while a creative artist shows an awareness of new relationships of forms as these forms are added or old ones changed or discarded. The creative artist sees design and is aware of his reaction to it. He does not see merely the outward aspect of things; he sees an inner structure. Nor does he see isolated elements, but rather the relations that exist between himself, his ideas, feelings, impulses and the relations among forms on the canvas as they function on the surface of the canvas and in space.

Often the artist will follow his most spontaneous impulses in placing forms on a canvas, letting one line, color, shape or movement suggest another, perhaps working sporadically over the whole surface, possibly jumping about constantly, or letting one form suggest another, in order to obtain the most immediate and freest possible projec-

tion of feelings on the basis of which he can develop his picture. For example, if curves seem to comprise the composition, one rather spontaneously giving rise to others, both adjacent and on separate parts of the canvas, this method may serve as the type of design impulse, and improvisation is given dominant emphasis.

Crystallized design results from the decisions made about the shapes, complexes, space organizations, both two- and three-dimensional, breaking up of monotonous forms, introducing contrast areas, construction and opposition of movement, and other design considerations. The picture is often kept in a state of flux until the last brush strokes are made.

A painting is a "sum of destructions"; it grows as an invention grows in the mind of its creator; a painting does not come full-born into the mind of the artist. "A picture is not thought out and settled beforehand. While it is being done it changes as one's thoughts change." (Picasso.) The forms that are originated are as unknown to the artist before he expresses himself as they are to the spectator who later may see them. A developed composition means one that has been literally developed right on the canvas. There are so many variable elements in art that it is impossible to visualize and anticipate all of the relations beforehand.

With the realization that a painting is not perfectly formed in the mind of the artist, we must approach the problem of painting with an inquiring mind in order to see how the forms are articulated. The role of intuition is basic here. There are two meanings usually implied when the word intuition is used. The artist may say that intuitive feeling determines the placement of a certain form in a certain spot, or, the organization seems to have grown, as

Picasso states, as if "a collaborator" entered into the work. This type of intuition stems from the imaginative manipulation of forms when the artist follows his impulses. This type of impulse is more than the simple desire to balance a picture, or to direct a movement toward a particular part of the surface. It may have the element of spontaneous, often highly charged emotional expression. The second kind of intuition is an insight or the sudden grasping of an idea. This sudden flash of insight results as the meeting of well-known ideas and a new idea produce a completely new concept. A new way of developing the design, for example, suddenly occurs to the artist, a solution to a compositional problem suddenly presents itself to the artist, or a new understanding of methods of working, possibilities of expression, flashes to mind.

"Intuition is fundamental to the very act of knowing." [1] "It [is] the fusion of body, mind and spirit that bio-psychology today calls the 'organizing acting as a whole,'" [2] ". . . 'knowing consists of two phases: first, always prior, the primal awareness of the organism-as-a-whole; second, its more precise sense-perceptual and verbal 'documentation.'" [3] Intuition is that flash of insight which clarifies what is already partially understood or partially solved.

Picasso speaks of being on good terms with the natural forces that are a part of art, of not knowing exactly how a painting develops. But at the same time he speaks of redoing a picture and of allowing idea as well as emotion to enter. "When you begin a picture, you often make some pretty discoveries. You must be on guard against these.

[1] See Chapter VII of *Foundations for American Education*, by Harold Rugg, World Book Company, 1947.

[2] ibid, p. 220.

[3] ibid, p. 218.

Destroy the thing, do it over several times. In each destroying of a beautiful discovery, the artist does not really suppress it, but rather transforms it, condenses it, makes it more substantial. What comes out in the end is the result of discarded finds. Otherwise you become your own connoisseur. . . A person, an object, a circle are all 'figures'; they react on us more or less intensely. Some are nearer our sensations and produce emotions that touch our affective faculties; others appeal more directly to the intellect. They all should be allowed a place because I find my spirit has quite as much need of emotion as my senses."

In speaking about the striving for development, Picasso says: "I have a horror of copying myself . . . Does he [the young painter] wish to believe that man can't repeat himself? To repeat is to run counter to spiritual laws; essentially escapism."

Some of the most pointed statements about the artist's search in a painting have been made by Georges Braque. [1]

"In art, progress lies not in an extension but in a knowledge of limitations. The limitations of a method secure in its style, engenders a new form and lead to creation. . . . The subject is not the object of painting, but a new unity, the lyricism that results from the mastery of a method. . . . I like the rule, the discipline, which controls and corrects emotion. Emotion must not be rendered by an emotional quivering. It must not be exaggeration or imitation of itself. It is the germ, the flowering and the created work. It is complete and self-contained."

The artist is on a search. He is working toward goals, but this search is not the aim of his work. His aim is to

[1] *Modern French Painting,* by Maurice Raynal, Tudor Publishing Co., New York.

create art, and the means for accomplishing this, the "aims" so to speak, only become revealed through the work itself. If this sounds ambiguous, let us look at Picasso's statement: "Whenever I had something to say, I have said it in the manner in which I have felt it ought to be said. Different motives inevitably require different methods of expression. This does not imply either evolution or progress, but an adaptation of the idea one wants to express and the means to express that idea . . .

"Variation does not mean evolution. If an artist varies his mode of expression, this only means that he has changed his manner of thinking, and in changing it might be for the better or for the worse. The several manners I have used in my art must not be considered as an evolution, or as steps toward an unknown ideal of painting."

The artist's aim is not research as such, but a positive statement of intense feelings and ideas. We can learn to appreciate the emotional content of his work by looking at pictures and developing our own emotionality through them. Through this process, we can arrive at an aesthetic basis for the appreciation of art.

Let us look at some of the ideas of several modern artists who were kind enough to write about their work, especially for inclusion in this book.

HANS ARP *(from a statement by Richard Huelsenbeck)*

Arp's way of working is as simple and convincing as his personality. The forms displayed in his sculptures are organic forms lifted out of his heart and subsequently near to humanity and near to nature. They are like eggs, breasts or stones that come from Arp's nearest environment, trans-

formed through the hands of the artist. Art and nature untouched by intellectual distillation are identical in Arp's works.

The philosophy behind Arp's work is near to religion; a saintly simplicity pervades all of Arp's thoughts; the sincerity and directness is overwhelming. Arp differs from Picasso, Braque and others through this directness which keeps him away from what he calls 'tightrope walking.' His work is nearest to the work of Brancusi who like Arp is one of the very few to rest in magic reality and limit himself to the purest forms. Arp's colors are as simple as his forms. They never try to excite but are a direct expression of the primary creative spirit.

Hans Arp told me:

"To become a painter was my greatest ambition, but I tired soon of the representational method. I think that I doubted this method already years before 1916, the year of the discovery of Dadaism. The nearness to the object and the sensuousness characteristic for my relationship to the object made it impossible for me to look upon it in an illusionary space. As the infinite, which is identical with the spiritual, pervaded my heart I couldn't stomach the three-dimensional space produced by what we call perspective. The perspective thus became either infinite or shriveled up to one point. The latter happened to me when I became interested in what we then called *La realité nouvelle,* or in German *die neue Wirklichkeit.* In the infinite space the object assumed its new magic reality emerging as a part of nature or, as Jung puts it, the collective unconscious. The object receives its value not through illusionary space but through the relation with other objects. Or in other words:

the reality of an object is not dependent on its intellectual setting but on its relation with other objects.

"In my collages I work this way. I first draw the organic shapes which later appear in the picture. They may have different colors but are mostly restricted to the basic colors, either yellow, red or blue, or of course white or black. Then I arrange these shapes on a given background, and it takes sometimes days before 'it clicks.' Then I give the work to a trustworthy person to have the shapes pasted on and the whole collage pressed and framed properly.

"Already very early in my career I found that sculpture has the greatest chances to express the spiritual value of an object. My sculptural work consists of shapes that could be found everywhere in nature. They are transmuted though to show the dimension of the spirit but nothing intellectual is added, no ideas, no purpose, no aim of any kind. These shapes are timeless, or I should say organized timelessness which points to one of the great paradoxes in our understanding of nature."

PETER BUSA: *Transparent Master of Ceremonies*, Figure 76

"The explanation for a work is never the work, but another thing apart of and aside from the real thing for me. I cannot explain art on the philosopher's terms. This becomes the line of inaction for the painter. And it is even more difficult to talk about one painting alone. One picture, in order to come about, is the experience that went into the sum total of other works.

"The new modern paintings cannot have *a priori* explanations because they demand a new vision every time one looks at them. A great part of this interpretation lies

in the spectator's own experience. We must evoke the spectator's ability to make abstractions. The most recent gesture in modern painting is in evoking in the spectator a greater participation and the ability to make abstractions out of the symbols which are themselves abstractions. Now we know that a different interpretation of nature is in order which requires the projection of our experiences into abstractions into reality. Some people get frightened and say that it is too subjective, but the modern artist knows that he can't become too subjective and that the more subjective he is the more he reveals man.

"What relation has my painting, *Transparent Master of Ceremonies,* to notions of abstract art? It is obvious that I'm concerned with a different morality of experience and consequently of space. In this picture there is the classic junction of the Allegheny and Monongahela Rivers greeting the Ohio. If you are from Pittsburgh, that is what you might bring with you. Our own feelings and experience are the only valid key to enjoying modern art. There is nothing in modern art that is not here (in the stomach). If I feel I want to use a nice clean yellow in my picture it is because I demand it in the architecture in my room and as part of my living. The objective world in this picture is fused with the space between the forms (thought forms) so that they are bound to engender new ones.

"If you follow the initial sketch for *Transparent Master of Ceremonies* through the subsequent versions, it remains close to its original idea, although compositional changes took place. In order to talk about painting in relation to the spectator, we must bring our geographic triangles in terms of our own experience and feelings, because many things make up the experience of looking at a work.

"For a long time I used to worry about the surface configuration in relation to the background. In some of my new work there is no background and all the areas are intensely more charged with forms, which makes it more meaningful to me. This space is not as logical as the Renaissance nor as realistic, but it fits my needs today and allows me infinitely more freedom."

MATTA ECHAURREN: *Accidentality*, Figure 77

"The conflict between the standardizing effect of society and the needs of the individual is exposed in a work of art when a man succeeds in revealing the dignity of the self. A work of art is the affirmation of individuality against the hostility of the environment. The power of this amulette depends on the effectiveness and success of such affirmation. When there is affirmation this individuality is what is called its magic.

"To some extent every man's interpretation of reality is hallucinatory. Values are but differences in delirium. Art asks one to extend this hallucinatory power by this act of creative ana-logic. Here the absolute that exists only in poetry is found (since poetry allows us change).

"The more individual an expression in art, the greater is its social significance. The need for art in society is to help keep a balance of forces between the individual and the social body. This is why art should not be a national art, but can only be an individual art; poetry is the weapon that the ego has against standardization.

"A revolution has taken place in art technique to allow a release of deep tensions and images. This is why I emphasize the picture instead of the painting, fundamental experiences instead of abstract relations, a violent under-

standing of the ego and alter ego, instead of the broken palpitation of maladjustment."

PERLE FINE: *Pleochromatic Composition*, Figure 78

"I do not make preliminary sketches. I do, however, make many sketches which do not in any way relate to the final painting, but which serve rather as exercises to stimulate thinking. In that way, the painting retains the spontaneity of a sketch because of its directness.

"As the name suggests, this painting appears to have different colors and different forms when viewed from different sides or axes. But it is in its color, its depth, or light-reflecting qualities that you find the functioning of the painting.

"Essentially, the work is based on a strong vertical and horizontal concept (Mondrian); the play of form and depth is *implied* through the quality of color.

"The basic approach to my painting is two-dimensional, and the three-dimensional is implied by the forms it evokes.

"In my work, I aim above all for *expression.* My hope is that I may render visible not the visible, but that through the order and visual clarity of the composition I may evoke from the spectator certain feelings and instinctual excitements which emerge as a result of its color complexes, tensions, forms which I have employed.

"That all this must be born out of a two-dimensional approach seems to me necessary, or the great lesson of the cubist painters and Mondrian would be lost. That it must retain its identity is of the utmost importance. While its identity may change as the picture progresses, the recognition of this change and its development makes for an enormously exciting experience."

BALCOMB GREENE: *Black Angels,* Figure 79

"My painting, *Black Angels,* has been executed from a number of oil sketches and collages. The finished painting does not differ much from the final sketch. In my work I am seldom so fortunate.

"This painting can be reduced largely to three geometric shapes or areas [in Figure 80], labeled *A, B, C;* to three biomorphic shapes, *D, E,* and *F,* and a seventh 'base' shape, *O.*

"In the first stages of the work, figures *D* and *E* are contrived by a free-hand and sketchy manipulation of oils, to achieve above all a rhythmic relationship of the two shapes, but I determine even at this stage the position of the figures in the total painting area. I have in mind a third figure which will not be introduced until an architectonic character has been given to the work. Through a number of trials the areas *A, B,* and *C* are arrived at, and subsequently the area *O.* The figure *F* is placed, with *O* as a base, *D* with partial use of the base, and *E* with practically none. There is also a diminishing order established between the vertical areas and the figures, i.e., *E* is contained totally within *B, D* largely within *A,* and *F* much less within *C.*

"With *Black Angels* I wish to establish a tension, an ambiguity even, between the two-and three-dimensional. The base *O* being white at the top, rises up unexpectedly flat. Thus figure *F* moves forward; and *E,* despite its size, back into the area where it has been accommodated. The white borders at the top of areas *A, B,* and *C,* and at the bottom of areas *B* and *C,* are now introduced, tapering so as to modify variously the perspective or recessional character of these planes. The borders to *B* dispute the character of that

plane most completely; an activity in structure is established which would not be appropriate to areas *A* or *C*.

"The extended 'leg' effect of *B*'s lower left is calculated to diminish the difference between geometric and biomorphic shape. The area *A* is given a uniform coat of paint, area *B* a two-value treatment, and area *C* a more complex treatment.

"In my analysis I have mentioned a number of characteristics which descend through a range of three. Such an order is one application of the 'unity in variety' idea. I don't mention the impulses of a similar kind which, carried into a sketch, must soon be rejected. The sketching process is loaded with rejections, even as is the collage method which I combine with it. Much of the construction is impulsive, but later can be made to sound regular and reasonable. Some of the devices (as the white tapering borders) are introduced deliberately with full consciousness of purpose.

"I have not found it desirable to rationalize procedure even consistently; that is, in some works (or in most canvases until I am 'struck') I defer the analysis. The reason for this is that the 'emotional expression,' the real thing which is the painting, the final thing, the nameless thing and indescribable, grows with a life which is its own.

"Mysticism? I think not.

"But a single line, once put down, is more complex in its activity than one can analyze. This being so, I make all additions tentatively. The line rejects or the line confirms. From experience I learn to trust, for a time, certain procedures. Rules, never. But procedures, often. In *Black Angels,* for instance, I did not abandon full color at any stage of the work or in any sketch. But a year later I some-

times reduce my color sketches to black and white, into values only; and then back into color.

"The emotional experience basic to the work and the 'essential aims' are not subject to description. Such experiences and aims can be thinly approximated in words. The danger, however, is not the inadequacy but the distortion."

CARL ROBERT HOLTY: *The Blue Warrior*, Figure 81

"The warrior abstractions I was working on in the years 1944-46 were originally inspired by some rather poorly drawn woodcuts in an old German magazine. These drawings, again the size of a 3-cent postage stamp, embellished the capital letters of the first words in each chapter of a serial story about knighthood. As I remember them, they depicted fallen knights protected by others standing above or behind them in attitudes of dramatic defiance.

"I made some pencil notes of these figures in which I attempted simply to reduce the elements of the drawings to silhouettes superimposed upon each other so that the two dimensions of the plane were sustained and a certain equilibrium was established. My interest in the compositions cooled off a bit and was only renewed after some chance visits to the armor collection of the Metropolitan Museum of Art. Armor, of course, is generally of a form already abstracted from the human figure. On these visits to the Museum, I also became enamored of the recently reconstructed heroic figure of the *Etruscan Warrior*, the one with the arm upraised as though about to strike a foe.

"As usual while painting, I was sketching and making small drawings around the painting I was working on and it was then that the key form of the later pictures appeared

(illustration). It is a bit difficult to describe at this time the sensations I had then about this form. But as I remember it, I felt that the particular shape suspended in the upper half of the surface of the picture was something more than just a shape. It had a certain threatening and lowering quality about it and it did not seem to want to end within itself but called for an extension of itself as well as for the customary contrasting shapes that give movement.

"*The Blue Warrior* is perhaps the most final picture of what now seems to me to be an early stage in the realization of the form and subject idea. It is my belief that all modern painters in one way or another serve the purposes of a real metamorphosis in values; and since form on the surface is the vehicle of these values to a painter, his fate is to compose and recompose, going at times from one extreme to another in search of new and better solutions to his problem."

KARL KNATHS: *Fruit and Table*, Figure 82

"Wishing to embrace as much of a total as possible in an intellectual analysis of an art work, we present the following formula:

Structure = State = Meaning

This analysis includes only the first proposition. It is hoped such an analysis may provide a bridge to the understanding of the other elements. It is merely a hint to the complete ordering of the composition. A critic has stated that what can be brought consciously to view in a painting relates only to the superficial aspect of the painting. This is perhaps true, as it needs the full participation of the formula, somehow by the artist and his reviewer. This analysis is after the event; as in painting I am always astonished when

completion is reached. So how can I say how the picture was painted?

"Diagram *A* [in figure 83] indicates the character of the virgin canvas (up and down).

"Diagram *B* indicates an essential contrast to its initial character. As it is placed high the eye must move up, and something similar of the initial character is maintained in the contrast.

"Diagram *C* indicates how the initial character of the surface is enriched and still maintained.

"Diagram *D* indicates the enrichment and dramatization of the dominant contrast by contrary shapes to the surface. Diagram *E* shows the sequence through which one of the movements is resolved to the characterized surface. Having the key, the observer can work out the various auxiliary movements, and how they are adjusted to the surface, by himself."

JOAN MIRO

(The following remarks of Joan Miro were written by James Johnson Sweeney; they are based on several formal and informal discussions with the artist and were first published in the February issue of the PARTISAN REVIEW, *1948.)*

"For me a form is never something abstract; it is always a sign of something. It is always a man, a bird, or something else. For me painting is never form for form's sake.

"In my early years I was an extreme realist. I worked constantly at realistic painting up to *The Farm*. . . .

"An essential factor in my work has always been my need of self-discipline. A picture had to be right to a milli-

meter—had to be in balance to a millimeter. For example, in painting *The Farmer's Wife,* I found that I had made the cat too large: it threw the picture out of balance. This is the reason for the double circles and the two angular lines in the foreground. They look symbolic, esoteric: but they are not fantasy. They were put in to bring the picture into equilibrium. And it was this same need that had forced me the year before to sacrifice reality to some degree in *The Farm:* the smooth wall had to have the cracks to balance the wire of the chicken coop on the other side of the picture. It was this need for discipline which forced me to simplify in painting things from nature, just as the Catalan primitives did.

"Then there was the discipline of cubism. I learned the structure of a picture from cubism. . . .

"At the time I was painting *The Farm,* my first year in Paris, I had Gargallo's studio. Masson was in the studio next door. Masson was always a great reader and full of ideas. Among his friends were practically all the young poets of the day. Through Masson I met them. Through them I heard poetry discussed. The poets Masson introduced me to interested me more than the painters I had met in Paris. I was carried away by the new ideas they brought and especially the poetry they discussed. I gorged myself on it all night long—poetry principally in the tradition of Jerry's *Surmâle.* . . .

"As a result of this reading I began gradually to work away from the realism I had practiced up to *The Farm,* until, in 1925, I was drawing almost entirely from hallucinations. . . .

"Little by little I turned from dependence on hallucinations to forms suggested by physical elements, but still

quite apart from realism. In 1933, for example, I used to tear newspapers into rough shapes and paste them on cardboards. Day after day I would accumulate such shapes. After the collages were finished they served me as points of departure for paintings. I did not copy the collages. I merely let them suggest shapes to me. . . .

"Nowadays I rarely start a picture from an hallucination as I did in the 'twenties, or as later, from collages. What is most interesting to me today is the material I am working with. It supplies the shock which suggests the form just as cracks in a wall suggested shapes to Leonardo.

"For this reason I always work on several canvases at once. I start a canvas without a thought of what it may eventually become. I put it aside after the first fire has abated. I may not look at it again for months. Then I take it out and work at it coldly like an artisan, guided strictly by rules of composition, after the first shock of suggestion has cooled.

"Then after the heavy burlap series of 1939 I began a group of gouaches which were shown . . . just after the war—an entirely new conception of things. I did about five or six of them before I left Varengeville for Spain and Majorca at the fall of France. There were twenty-two in all in the series. They were based on reflections in water. Not naturalistically—or objectively—to be sure. But forms suggested by such reflection. In them my main aim was to achieve a compositional balance. It was a very long and extremely arduous work. I would set out with no preconceived ideas. A few forms suggested here would call for other forms elsewhere to balance them. These in turn demanded others. It seemed interminable. It took a month at

least to produce each water color, as I would take it up day after day to paint in other tiny spots, stars, washes, infinitesimal dots of color in order finally to achieve a full and complex equilibrium. . . .

"After having finished this series of paintings in Palma, I moved to Barcelona. And as these Palma paintings had been so exacting both technically and physically I now felt the need to work more freely, more gaily—to 'proliferate.'

"I produced a great deal at this time, working very quickly. And just as I worked very carefully in the Palma series which had immediately preceded these, 'controlling' everything, now I worked with the least control possible—at any rate in the first phase, the drawing. Gouaches: in pastel colors, with very violent contrasts. Even here, however, only the broad outlines were unconsciously done. The rest was carefully calculated. The broad initial drawing, generally in grease crayon, served as a point of departure. . . .

"And in the various paintings I have done since my return from Palma to Barcelona there have always been these three stages—first, the suggestion, usually from the material; second, the conscious organization of these forms; and third, the compositional enrichment.

"Forms take reality for me as I work. In other words, rather than setting out to painting something, I begin painting, and as I paint the picture begins to assert itself, or suggest itself under my brush. The form becomes a sign for a woman or a bird as I work.

"Even a few casual wipes of my brush in cleaning it may suggest the beginning of a picture. The second stage, however, is carefully calculated. The first stage is free, un-

conscious; but after that the picture is controlled throughout, in keeping with the desire for disciplined work I have felt from the beginning. The Catalan character is not like that of Malaga or other parts of Spain. It is very much down-to-earth. We Catalans believe you must always plant your feet firmly on the ground if you want to be able to jump up in the air. The fact that I come down to earth from time to time makes it possible for me to jump all the higher."

ROBERT MOTHERWELL: *Person With Orange*, Figure 84

"The orange background, felt all over, asked for an image. As though ice suddenly said, yes I like my material but I want a shape. The figuration arose spontaneously, surprising me, though I had used the shape previously.

"Medium: flimsy papers painted with oils.

"Process: what Yeats called, in describing a class of artists, 'simplification through intensity.'

"Felt content: ecstatic figure.

"Intellectual references: to the traditions of painting.

"Deviations from the cubist *papier colle*: automatic, not analytical drawing; introduction of atmospheric light; chiaroscuro.

"Light: reddened and angry sky at end of a day.

"Colors: mat oranges with blacks, greys, and Mediterranean blues.

"Types of paper: butcher, wrapping, and Japanese rice.

"When made: late afternoons and nights during a week of snow and ice early in 1947.

"Where made: in a boarding house on the southeastern coast of Long Island.

"Dimensions: about five by three-and-one-half feet."

JACKSON POLLOCK: *Totem II*, Figure 85

"The source of my painting is the unconscious. I approach painting the same way I approach drawing, that is, directly, with no preliminary studies. The drawings I do are relative to my painting but not for it. When I am painting I am not much aware of what is taking place; it is only after, that I see what I have done.

"I work on unstretched canvas tacked to the wall or floor. I need the resistance of a hard surface. On the floor, I can literally work from the four sides, use heavy impasto or a fluid-running paint. Often with foreign matter added, such as gravel, sand, nails, broken glass."

WALTER W. QUIRT: *Origin of Life*, Figure 86

"I don't have a great backlog of pictures. This is because I work over many of them. It used to bother me to paint over my own works. That is, I felt somewhat guilty, although enjoying immensely the excitement of extending a partial statement to a larger emotional experience. I no longer have a sense of guilt concerning the repainting of my own works. It is simply exciting to me personally to become identified with the emotional experiences of others by 'collaborating' with silent partners or my former self, never silent.

"Individual fantasy tends to lose its energy or become stereotyped. This is particularly true of artists who are compelled by adverse circumstances to making a living at work outside the actual practice of painting. Our colleges and universities are filled with such painters. They don't have the time to explore their personal emotional dimensions, much less those of all life. They usually paint well. But

what they paint is unimportant because it is incapable of revealing new psychic dimensions.

"Painting with me is a problem of transforming the original negative energy into positive results. This brings into play intuition and reasoning. My work is a series of emotional mistakes brought up to a point of correction. It is a process of destroying the self, particularly at those moments when the self looks pretty good. It is only possible to destroy the self when the destruction is inspired by the need to make something bigger than the self. I find it possible to transform negative personal energy into a positive quality by making equations between my emotional limitations and the positive emotional drives of society in general. Psychological values external to me and more important than mine excite me, and so painting has become an adventure. . . .

"Since the external reality I write of is a psychological force, it can be captured and placed into any type of imagery without loss to its communicable values. The picture reproduced is based on dogs and Indians hunting. Like much of my work, it is painted over a similar theme, and some of the animals remain in the same state as in the original. The early work was mixed emotionally, therefore it comprised many styles. The final work is based on design. The subject has nothing to do with the basic content; it simply is a point of departure. It is the use of lines, right angles, curves and colors that reveals the basic meaning of the work. I think it explains much about contemporary American psychology. Hunting is an action that usually brings into play sadism and aggression. Pictorially, it calls for rapid tempo and angular lines suggestive of aggression, of the kill. That is, it would, if hunting were the basic story. Here it isn't. Here it

is used to take the psychological state of aggression and transform it into a spirit of play. This takes the danger out of aggression without loss to the energy of the work."

ABRAHAM RATTNER

"I cannot write or talk about 'aims' 'ideas' and 'subject matter' or 'meaning' in a painting, simply because I am a painter and not a writer. Painting is my form of expression—and in a painting all is contained in the color, form and paint.

"I believe that the artist's greatest source of expressive power can be found in the field of color. In the art of painting, color remains for the artists of our time and of future generations to explore. That whole new world of expressive possibilities is waiting for us to dig into and seek out the secrets which until now have been but barely touched upon. I do not refer to the laboratory of the science of color, the prism and the rainbow—but rather to the spirit of the artist and of our time. When the call will come, then color will respond. And then we may have that great new awakening in art—the modern Renaissance, when art will give forth those great potential miracles in painting, the new symphonies in color.

"In painting I find that the articulative force is color. Color is to a painting what sound is to music. It is not limited by the color we experience in the objective world, but the experiences of our livingness touch the keys and chords of our inner being and bring into play that wonderful color world of our imagination. I see this as a new kind of Luminosity or Light which may be applied to relationships and responses to the colors the artist works with in

his painting. This then is not pure theory. The intangible thing is the inspirational element—and the artist's inspiration can respond more to pure sensibility than to anything rational, intellectual, analytical— of the mind. It is part of the region of the heart. But once the call comes to the artist to release the fullness of his rich nature, then color will flow out and his painting will glow. Know that a color in a painting is also a metaphoric ingredient, and colors are beings peopling the artist's creative world and become communities which are subjected to the tangible laws of painting; and thus every square inch of area in the painting becomes related to every other square inch and finally to the entire organization.

"Do not be confounded between physical space and feeling.

"In his anxiety to integrate a space feeling into the flat surface of the canvas the artist has in the past tried all sorts of methods. One was chiaroscuro, or light and dark values. The modern departure from this method is the simultaneous contrast of warm and cold color.

"Remember that the artist in dealing with an object is confronted with a part to be sacrificed and a part which has to contain enough extra to make up for that sacrifice. It is the compensation of volumes and of values for sacrificing the objective realities. The artist makes a choice knowing that he is not sacrificing truth or reality for taking this liberty. In choosing, the artist uses his artist sense. This sense becomes one of the elements in a work of art and may be called the artist value. The painting as a structure of plastic forces becomes the universal structure of the particular emotional response of the artist to his experience, and is built upon fundamental laws of the universe. One of these

laws is the principle of compensation of forces. Any liberty the artist may take must be bought and paid for with another element. For example, in painting an object this object is fused with the other objects or parts of the picture by passages of light, dark, halftone, or color, etc. These passages are deliberately introduced by the artist and are compensations for the sacrifice of the objective values.

"Every work of art, I find, is a combination of the physical values and the artist values. A painting is made up of elements which are also part of the artist's vocabulary and are the realities with which he builds his expressive structure, such as values (light, dark, grey) line, mass, volume, shape, space, movement, proportion, contour, color, weight, support, thickness, texture, tension, stress, passages from one area to another, pigmentation, etc. All these elements are subjected to the artist's *parti-pris*. He exercises his artist jurisdiction over these elements. This jurisdiction is directed by his sensitivity as an artist. These subjected values may be referred to as the "artist values." They are integrated with the spiritual forces in a work of art, and respond to the principles of order, harmony, contrast, intensity, similarity, taste, paint quality, feeling, emotional force, meaning, etc.

"Thus the vision of the eye is at the service of the vision of the soul.

"A painting, if it is achieved at all, is made with the help of God. It is as inexplicable as a flower, the song of a bird, electricity, atomic power, love and so forth.

"I would recommend to those who desire to be initiated into the Temple to consider that art belongs to the spirit, and partakes of the nature of religion. That creation in art is as unexplainable as creation in nature. That the arts' open door to self-enrichment for anyone is self-giving—love. With

much hard work, sacrifice of one's time, largeness of mind and great warmth of heart, the inner sensibilities will manifest themselves into an appreciation that will surpass all understanding."

CHAPTER ELEVEN

Building A Painting

WHILE the artist who doodles, or the artist who "collects material" by sketching and improvising may not strongly experience balance, he does so as soon as he begins to form his results into a strongly related whole. If from the very beginning of his work he strongly experiences equilibrium it may influence the placement of forms and the development of the composition, for the disequilibrium he produces on one part of the canvas will call for balance on another part. The degree of control as the work develops may vary, but at some point the relation of forms is strongly experienced so as to create a strong emotion-tension equilibrium. At some point in the organization and design of the picture, the feeling for balance and unbalance markedly influences the design of the whole and the artist works over the whole

canvas, compensating the movement and "pull" of one form by another.

This process of working over the entire canvas can be observed in the intuitive work of many children, for they often place forms on various parts of a picture, keeping it working as a whole; see figures 87-94.

In working from nature, the problem is encountered of relating what is seen to what is felt. The artist can work automatically, playfully, impulsively, referring to nature only sporadically and using it for the very freest improvisation, or he can derive more definite forms from nature, delaying his spontaneous impulses and subjecting them to a more definite spatial and surface-tension concept and feeling, as he translates feeling into related forms on a canvas surface. Though working automatically, he can organize and crystallize relationships of forms later, or he can more definitely form his impulses more immediately into surface and three-dimensional space oppositions. Because these methods of working are so often fused in the heat of creative activity, their differences may not be observed. Yet the differences are important, for awareness of them helps the artist and spectator in creative participation in a work of art.

In working from nature the artist changes what he sees in order to express himself. When he organizes these changes he is said to be designing. Let us see at what point the conditioning or designing of spontaneous impulse enters, and what the nature of this designing impulse is. This is especially important for the beginner in art who too often substitutes reason for feeling, an easily grasped intellectual formula for felt designing. Feeling insecure in what he is

doing, at a time when he is not able to push beyond his first spontaneous sketches, when he has not yet found within himself the intense relationship between feeling and idea, he may too readily seek a crutch, a premature conscious method of organizing forms. He may feel that unless he imposes some sort of discipline on what he is doing his work will remain amateurish, unorganized, a jumble of colors and forms. However, the discipline is not usually one that grows from within, but rather one too readily grasped intellectually without full emotional testing.

One method for creative designing is to make a selection from the natural scene, as the painting develops, balancing, contrasting, or harmonizing one form against another. That is, one line slanting in nature is selected and placed on the canvas, and another line slanting in the opposite direction is also selected and placed in the painting. (Quite often this process becomes so mechanical that even the areas blocked off because of these lines are mechanically filled in. Any imagination that might possibly have gone into this two-dimensional type of designing becomes almost completely lost. Instead of continuing to allow a free flow of imaginative and creative impulses, the artist often fits his feelings and ideas into an improvised design method.)

This type of designing—linear opposition—is only one method, yet it typifies more complex methods where part of a larger design process is separated from the whole, becoming mechanistic by its shortcomings. This is characteristic of the use of design principles and methods dissociated from their original function within an integrated creative act, yet still operating weakly when interposed between the creative impulse and its projection. Instead of channelizing his impulse prematurely, the artist can make very free

selections, allowing the natural scene to stimulate what he is doing and allowing for organizing impulses to form gradually and freely out of the painting itself as it proceeds. The artist cannot only continue to find opposing lines and forms in the scene, rather spontaneously selected, but an organic, intuitive evolvement of shapes and directions can take place on the canvas. Rather than use any set design principle, such as opposition, harmony or proportion, the artist can select and arbitrarily interpose his fantasy, his spontaneous impulse, his feelings. The design discipline in painting can grow out of the feelings, ideas and body responses of the artist himself, without any one element usurping the role of another.

When the artist improvises with emotional intensity, there is a sense of complete participation—a sense of imagination and fantasy, of going on a journey, as it were, with the forms that are placed on the canvas; and yet there is a feeling of certainty in what is being done, as if the organic feeling of the body has dictated the right relationship and growth of forms. Part of this emotional intensity takes place in rather strongly felt muscular movements in the arm itself; but this is only an incidental manifestation of the total bodily participation. (The muscular manipulation of the arm should not be confused with the bodily felt movements. It is only mentioned here to indicate that emotional tension manifests itself throughout the whole organism.)

This type of order on a canvas, where there is a gradual development of one form out of another, of one part of the canvas as almost automatically growing out of, and suggesting, another part, of the rather automatic adjustment of various parts of the canvas and forms in the canvas to one another, is an organic process. There is no usurpation of the

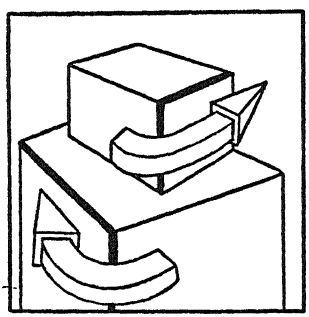
emotional feelings of the artist by artificial ideas as to how forms should be combined; there is no substitution of "pretty" emotionality for bodily felt emotion and bodily felt participation in the elemental combination of forms themselves; and above all there is a free flow of intuitive, imaginative combination of forms, an organic evolvement determined by the whole of the human organism. The combination of forms takes place according to a larger order within the human being himself. This does not mean either arbitrariness or dilettanteism in painting. Rather it means the type of emotional discipline, intellectual awareness, and security in and belief in the organizing powers of the human organism itself, based on a discipline of emotional sensitivities for control of the painting. There are forces within the human being that, while lying below the threshold of human consciousness, nevertheless are released in a painting when those fundamental feelings are permitted full sway.

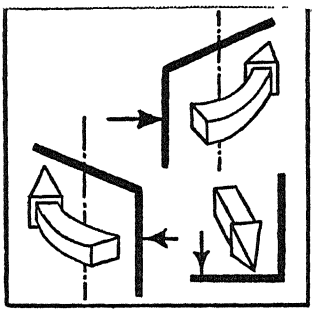
In the following pages, different ways of working are demonstrated. These methods are not meant to be definitive. They are presented in an effort to make specific what has often seemed abstruse and general in explanations of art. There is, of course, a very great danger in giving such exact descriptions, since their meanings can be too easily separated from the whole creative act, and especially from the experience of which they are a part and which gives them any validity. Moreover, each artist uses these ideas according to his own imagined concept. It is hoped that the explanations will serve as a stimulus to further clarification by others; they are also presented for the purpose of suggesting that no one method for working in art can be established.

In diagram 61 we see two solid objects, the table, and the box on the table. The artist wishing to create opposing spatial movements can conceive of a movement to the left around the table and can oppose this by a movement around to the right of the box. The table and box might suggest the opposition of movements to one artist, but he has to create this on the canvas. (Both the imagined concept of the individual artist and anticipation of the laws of his medium enter into the "suggestions" offered by nature.)

The artist may next follow the feelings and ideas suggested by what he sees, or he can draw his inspiration from what he already has on the canvas. In this case he creates a tension movement down with an additional plane in the lower right, diagram 62, with the idea of bringing the space forward.

When the artist works from the scene he sees, diagram 61, he creates the opposing plane movements that he feels; he may express this feeling with a variety of types of planes, diagram 15, regardless of the solidity of the two forms.





DIAGRAMS 61, 62. When working from a scene the artist can imaginatively, spontaneously and intuitively select and create three-dimensional space movements. The planes that articulate this space must be contained two-dimensionally within the picture: each element needs to operate in a dynamic two-dimensional tension relationship.

The rotating movement left of the lower form in relation to the movement right of the upper form can be used as a basis for further development. In creating movement and balance he may be selecting space movements, thinking only in terms of negative space. The difference between positive and negative space is dependent upon realistic spatial signs; the artist is not concerned with solid form as such, for he is not working merely perceptually. (Positive space is that volume of space that a volume displaces in nature. Negative space is the space around an object. A solid object is, therefore, conceived as a positive volume, and the surrounding space as negative volumes.)

In relating planes on his canvas the artist is basically working with surface and spatial relationships. It does not essentially matter, therefore, whether the elements in nature that stimulate the artist's imagination are solid forms or not, since he works with plane relationships on his canvas.

More suggestions come from the subject, and the artist clarifies and intensifies his feelings. Then, too, the spatial positions of the planes he uses gives a very definite constructive basis for the development of the canvas.

The artist often probes his way as he goes. Frequently he does not know what he is doing in his painting at the moment that he combines forms. He may or may not give himself general directions. And while he may be aware of his emotional intensity, he is not always aware of the form it will take. In the following illustrations, the spatial order has been arrived at freely, and not by such a systematic method as the preceding explanatory diagrams would seem to indicate. The work proceeded normally, and changes were made and later analyzed.

The difference between working realistically or ab-

stractly is one of emphasis rather than method. Conceptually abstract rather than perceptually realistic relations of forms are important. It is the artist's prerogative to change what he sees. He may desire to break two forms seen in nature into ten forms. Or he may only consider the largest spatial relationships in the scene, and interpret them in one or two large planes, regardless of the number found in nature. Or the artist may feel the rhythmic design of his landscape and, using this as the paramount motif, work with this design and the spatial organization suggested, no matter what these motifs represent.

The artist, of course, may maintain the pictorial scene from which he is working. This does not mean that he is limited. It does mean that he must be fully capable of preventing perceptually realistic considerations from interfering with his composition. Planes are often selected which maintain the realistic scene but also create force relationships. This does not mean that some change from realism is not made, but the changes are not as radical. The change has a great deal to do with the more subtle factors in painting which are not always apparent to the eye, but are to the feeling.

The creation of force is not dependent upon radical change, but rather on a conscious and emotional relating of planes. Such relating of planes requires intensity of feeling. This feeling may result from slight changes from realism. As the relationships are created, and the canvas develops, the nature and the amount of change necessary can be found.

Let us compare the uncreative and creative methods of working. Working uncreatively, the artist copies a scene photographed in figure 95. Figure 96 shows the beginning

of the painting. Now it is true that there are certain creative functions performed, because the artist selected the scene, and emphasized and simplified form. But such expression is not profound. It does become more meaningful when free expression is designed and given intensified emotional form. Changes have been made to accomplish this. In figure 96, for example, plane A was drawn to create surface and spatial oppositions indicated by the arrows. A spatial opposite was created as indicated by arrows B and C. The artist has begun to depart from what he sees; this indicates one way the artist develops an abstract painting. However, in order to illustrate how a realistic painting is developed, based on two-dimensionality and space movements, these changes have been eliminated in figure 97, and less obvious departures from the naturalistic scene have now been used. Planes made by the realistic forms are related; an indication is given of how the canvas is developed in which realistic elements are manipulated to create the idea and feelings of the artist, while preserving the actual scene. Additional forms have been added, to indicate how this painting might have been developed. In an abstract painting, these additions would have been done by means of abstract planes; here, objects have been used.

Figure 98 shows the scene used, and the position of the easel in relation to this scene, in developing an abstract charcoal drawing. Photographs of the drawing as it developed were taken. The drawing grew on the basis of general reactions to the scene, the reaction to the drawing itself, and to the specific elements in the scene which suggested space movements, shape, plane movements, etc., all fusing on the canvas.

Figure 99: In order to create a movement forward on

the right side of the canvas, balanced by movement into the canvas on the left, suggested by the tree on the left, two planes were related on the surface of the canvas; the right-hand plane creating a downward movement in relation to the left plane moving up. These planes are interpretations on the canvas of the experienced space idea and feeling. These planes do not as yet create space movement, but rather create the basis for further development, out of which a later space construction will be organized.

Figure 100: The rectangular plane at the upper right was put in to create an emotion-tension toward the right down and forward. The dark plane at the bottom continues the downward movement, and at the same time creates an emotion-tension direction to the left. The dark plane at the left turns on its axis into space and creates a movement to the left and upward on the canvas. The three planes at the right of the drawing create a movement coming out and down; the two planes at the left, a movement up and into the paper; the gray plane continues this movement up and pushes that area back into space.

Figure 101: A movement forward was created by the dark plane in the center of the picture, suggested by the extended branch of the tree at the left in the scene. The plane at the far right directing space movement forward, was suggested by the branch of the tree at the right, as in the scene.

Figure 102: The lower planes help create a down and forward movement at the right, which is directed to the left and then back and up at the left. The entire complex of planes now has a more defined circular movement, starting at the top, coming out of space as it goes down and rotating back into space and going up.

Figure 103: A new idea or feeling forced the destruction of existing planes, expressing itself in structural changes. Larger planes have taken the place of a number of smaller ones. This clarified the new intentions of the artist. The opposition of movements down at the right and up at the left was strengthened by the added plane. Arrows indicate the direction of the surface opposition.

Two opposed circular movements indicated by the arrows were suggested by the scene, and the relation of forms on the painting.

Figure 104: Simplification and addition of new ideas and feelings are shown, with a strong counter-clockwise movement to the whole canvas.

Figure 105: Larger planes, simplification and clarification of organization, with strong definition of a counter-clockwise movement on the right of the canvas and a forward movement at the left. Both opaque and line planes have been used.

This drawing has not been completed; it illustrates, however, one method of working with space and tension relations. An opposition of two large planes is seen. The line-plane at the right slanting in space out from the top to the bottom, directing space down, moves in opposition to the space movement created by the large plane in the lower center of the canvas, directing the movement from the right toward the left and back into space. The surface emotion-tension opposition is to the left at the bottom and to the right in the upper part of the canvas.

A charcoal drawing that was completed by the author without the periodic interference of the photographer is shown in figure 122. It was done from a standing nude. The emotion-tension shifting was towards the left at the

bottom of the picture and towards the right at the top. These emotion-tension movements were established by planes parallel to the picture plane, and at the same time their placement in space was experienced. The spatial movement is clockwise moving down and to the right, then toward the left by diagonals and shifting verticals, and then up at the left.

In developing his canvas emotionally and intuitively, the artist may attempt to view his work objectively at times. He may attempt to discover the direction his spontaneous expressions have taken and evaluate what factors have entered subconsciously, intuitively, to give it that direction. He may sense the working out of a compositional or emotional idea, which by development may become the main motive. The painting may seem to have a lyrical feeling—it may have delicacy or it may run toward heavy decorative form—it may develop a very particular mood—it may be classic or romantic in feeling. And he may attempt to keep his ideas and manner of working within this expression as he works, and as he comes back to his painting each day.

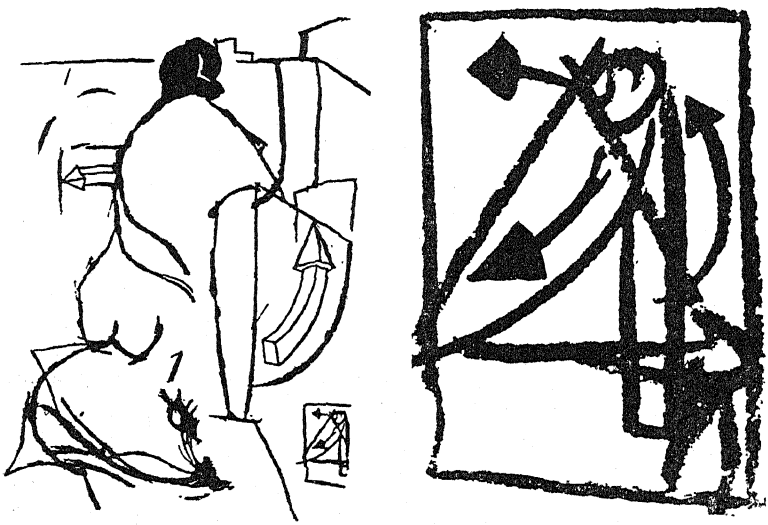
As the painter considers his work, he may realize that his composition has taken form on the canvas through large overlapping planes, or a closed ordered structure, perhaps through a breaking up of space by many small planes, as in Cézanne's work; or he may have a composition of a very free flat space with curvilinear forms, as in some of the work of Miro. Building on what he has, the artist tries to develop the compositional motif and feeling and increase its vitality by working ever more sensitively and emotionally. The artist's final statement will be an intense and emotional work of art, expressing his total feeling in a form which has a conscious development of motif-idea.

The considerations we have brought up in this book have a direct bearing on the teaching of art. Personal expression, originality, intensity of feeling in the student are highly esteemed by the art teacher. Development of the student's insight, awareness and stronger feelings are important concerns of the instructor. The teacher understands the art processes, helps his students express themselves, clarifies their relationship to the art medium, and through their own experiences helps them discover the laws of the medium in which they are working. The instructor does not emphasize the formal problems of art at the expense of the development of the emotional or intuitive sense of the student. The teacher's aim is to help the student understand himself, to find a constructive relationship to society and the world, and to express his own individuality. Guidance and help, and the development of personal discipline and individual insights—not imposition—are the teacher's aims.

A new student coming into class may think that all he is coming for is to learn how to draw realistically the world about him—to copy it. This attitude is represented by a student when he entered a class in design:

"I thought that if I could only reproduce what I saw I would feel successful. Having learned previously that the only purpose in painting a still-life was to see the contours, forms and colors of the objects and reproduce them on canvas, this term I have realized that subject matter is not something to copy, but to be used as a starting point for the expression of movement and rhythm. Movement and rhythm must be felt before it can be expressed. Sensing that this was my biggest problem, I saw line, form and color, but any feeling of movement was absent. Consequently, my first drawing was of isolated objects.

"Drawing from the model presented more problems. I did not mind changing the fold of the drapery to balance something else in my picture of the still life. But to make an arm or a shoulder go in, when actually it came out, seemed another matter entirely. A drapery can fall in any manner but the human body has definite limitations of position. When changing the position produced a distortion, I could not condone such a change. In the course of a few days, my aversion diminished. I felt a gradual realization of the necessity of balancing spatial movement within the picture as well as linear movement. Thus I learned to subordinate the position and form that I saw in nature to the movement I felt the picture required; and provided that



DIAGRAMS 63, 64. Dissatisfied with the background of her drawing, a student introduced a spatial movement up and toward the left indicated by the arrows in diagram 63 and counterbalanced this by shifting the forms at the bottom of the picture toward the left. The arrows in diagram 64 refer to this new movement organization decided upon by the student.

a movement already existed in nature, I did not mind changing the position of an arm or a shoulder for the purpose of emphasis or exaggeration of that movement. I felt I had to pull the arm of the model down."

The drawing to which this student refers is shown in diagram 63. It is her own. The model was placed on the drawing in a diagonal direction while the background was almost completely ignored. The student seemed dissatisfied with the background, and when she became aware of the strong diagonal direction of the figure on her paper, felt that the background could be related to the figure by opposing one to the other. At the same time, she began to change the figure to help this integration. The arrow in the background of the drawing attempts to illustrate the spatial movement with which she began to work, while diagram 64, shown next to the student's drawing, was an exploratory visualization of movement relationships (with the triangle representing the model, and the circle the head) with a diagonal movement to the left suggesting a space movement into depth created by the figure, while the arms at the right and at the top indicated opposing movements of the foreground and background in the drawing.

(While this is not a book on educational methods in art, it may be noted that the techniques of analyzing space movements, or any other design problems or tools, as well as techniques of drawing, can, in the hands of a teacher, become nothing more than artificial systems for teaching, if they become goals or ends in themselves rather than the means for creative teaching. Techniques and skills should not be used as crutches or systems to which initiative is subordinate. Art teaching is not a piecemeal activity where the student first learns how to draw from casts and then

goes on to life composition. It is not a question of learning textures and then applying them to some problem. Rather, insight into a whole situation is necessary; out of this grows a need to learn how to draw, and an awareness of the nature and importance of textures.)

(The organismic psychologists have emphasized the importance of the role of insight in the learning situation, of intuition, of knowing before documentation by the separate sense, of knowing through generalization, and of the importance of the "cue" concept in the appropriate attitude which explodes the meaning in a situation, of primal awareness on the part of the human being in a learning situation. On the basis of the individual student, and his "readiness," temperament and tempo, teaching situations can be created for guidance and development of his experience.)

A controlling factor in working from nature is the spatial one, composed of the "in and out" movement. In working from the still-life in figure 106 a spatial movement such as that shown by the arrow was conceived. The artist is not interested in copying such a movement; he is interested in putting it into the language of painting and does so through plane relationships. The painting began with planes A and B, figure 107. Plane A was conceived as coming forward in space in relation to B, which would go back in space, with each plane placed while the artist felt an emotional tension through surface oppositions and space oppositions.

The force movement will be A, moving down; and B, moving up. To create this force, the artist changes what he sees so that when he places A and B in opposition, the exact relationship found in nature may be different on the canvas.

While the actual spatial relations of objects in nature influence the creative organization in the canvas, they need

not limit imaginative expression. Because understanding of realistic space in nature can help us understand the influence of space on his expression, let us examine the artist's visual relationship to a scene.

The view from which the artist paints a scene is determined by his position either parallel to or at an angle to the main forms which create the spatial direction in a scene. For example, if the artist stands in front of a wall looking straight at it, the line which it forms where it meets the floor will be horizontal, but if he turns his head toward the left, this line will slant up toward the left as it slants into space; and if he looks toward the right the line will slant up to the right.

In a painting, the space is said to open from left to right, or right to left, or remain parallel to the canvas surface, depending on the main direction of the space in the picture, i.e., whether the forms which create the space are based on a direction slanting into depth toward the left or right, or are parallel to the canvas, and the point of view of the spectator is on the left, right or center of the picture.

This method of analyzing spatial relationship of the artist to a scene or a spectator to a picture has often been too literally applied to the organization of planes in a can-

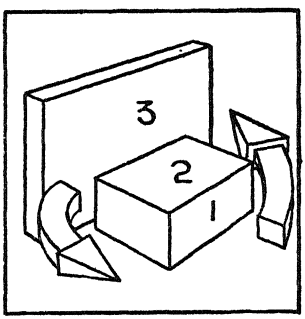


DIAGRAM 65. While the spatial position from which the artist views a scene influences his ideas and feelings, his perceptual vision does not dominate him.

vas; it can impose a system on the creative impulse. Volume and tension movements have likewise been arbitrarily categorized: there is the theory that when one views a volume from the left it must turn in a counter-clockwise direction, diagram 65: the emotion-tension is toward the right at the bottom of the volume and toward the left at the top, it has been insisted, because the bottom plane (#1) is farther right than the upper (#3), and therefore the view from which the volume is seen already establishes the main tension directions. It is evident that this limits the artist to an optical system for creating relationships in his canvas.

In the still-life we have been discussing, one form is above the other as the whole still-life recedes into depth. The direction of the space into depth is from the left to the right into the third-dimension, figure 111. Literally applied to space organization in a painting, planes might be overlapped, as in figure 112, and because this strong spatial direction would need to be balanced, plane X would be added. This space construction has, of course, been mechancially produced here, though it may be experienced subtly in a very imaginative painting.

This explanation is made here only for illustrative purposes and is in no way meant to imply a method of organizing space. The use of such a method, just as in the systematic use of design principles, can be thoroughly detrimental to creative art; *really imaginative spatial organization is intuitively and freely created.* Organizational space concepts often do enter subtly, and even directly, influencing the creative concept of the artist when he works from nature, and must be subordinated in his mind and in the spectator's mind to the direct emotional expression of the picture as it relates to organization of forms. The preceding

is mentioned here, however, not only to point out the mechanistic way of thinking, that can be so easily applied to the organization of space in a painting, but to demonstrate that overlapping of planes, and the main direction of space in a realistic scene, and also in the canvas, can influence the feeling for space balancing. For example, in the still-life which we are discussing, the fact that the forms build up toward the right as they recede into depth, producing a slanting space direction, influenced the lowering of the right side of the still-life and the concomitant creation of a balancing forward movement at the right of the canvas, by means of a plane, similar in shape to a form in the still-life, and placed at a particular height (through horizontal and vertical considerations in placement) and creating at the same time a tension relationship with a second plane and the four sides of the canvas. The slanting space movement into depth in the still-life, in other words, required some sort of opposed space movement.

The canvas creates a particular relationship to a scene; that is, it can be parallel to, or at an angle to objects in a scene, figure 113. And this relationship also, often subtly influences the artist's work. This relationship is often referred to as the constructive basis for the organization of space in a canvas.

The influence of the space formation in the actual scene as it relates to the canvas is so subtle within the larger whole of the artist's imagined concept, that to attempt any generalization as to the role it plays could only be arbitrary. The relation of the canvas to the scene is mentioned here for it does influence spatial organization, and an awareness of this influence can help properly integrate it consciously within the larger scope of the whole creative act for the individual.

The fact that the space does go into depth in relation to the canvas, forces the artist in his own way to create an opposition to it in his painting. Also, the arbitrary way in which the canvas is held in relation to a scene, as when the art student looks over his shoulder when painting from a model, often has a confusing effect on his development of a spatial organization in the canvas. While the four sides of the canvas really form the essential and fixed basis for the composition, and the scene from which the artist worked is not important after the picture has been completed, the establishment of a fixed position for the canvas in relation to nature has an important bearing on the development of a sustained study. (The degree to which this is important varies, depending upon how much the artist makes use of nature, in what way, on the artist's own way of working, so that no rule can really be established, and it is pointed out here for what value it has in terms of the individual's experience when he is working from a scene.)

The artist in working from nature feels one part of the scene coming forward and another going back. This feeling influences the tension relationship of form and the exact placement of each plane on the canvas. In other words, while the artist can create any relationship he wishes in his canvas in reacting to a scene, the experiencing and creation of oppositions in space are influenced, often by the particular spatial position of parts of the scene. Two planes when related in opposition on the canvas may have particular reference to a spatial idea and feeling as the canvas is developing, even though the realistic space relationships of these planes are not immediately clear to the spectator. Space ideas and feelings profoundly influence the particular way in which two planes are related in opposition. The

artist imaginatively creates visual space balance in the scene, thereby relating nature to the laws of the picture plane. The spatial unbalance which he feels in a scene is immediately corrected by changing what is seen or by the introduction on the canvas of an imaginary and balancing form. The artist may use forms in the still-life which will express his space feelings and ideas. In the relation of planes A and B in figure 107, the space movements were opposite to the space movements in the scene. That is, one sees the plane A in the still-life, figure 108, farther back in the third dimension, realistically, than plane B. Yet within the artist's space concept, the feeling is that plane A comes out, and plane B goes back, as expressed in the canvas.

Plane C was next added, creating the space movement illustrated in figure 109, a clockwise volume movement, plane A coming forward and plane B going back. This was opposed by plane D turning on its axis. Next, plane G was added to the composition, figure 110. Plane G was felt to create a force toward the right, arrow E, in opposition to a force toward the left of planes A, B, C, and D, arrow F, as well as continuing the space movement begun by planes A, C and B, complementing it and creating a clockwise volume movement. With these few planes as a basis, new space feelings and ideas were developed. Improvisation, freedom of space and linear organization, were the keynote.

Rather than an additive process, where smaller planes gradually form larger complexes, larger planes may be first used, on the basis of which smaller ones are added. Intuitive development and changes in the composition (with or without an *a priori* design, realistic or emotional concept) will still continue to take place.

Personal expression can enter into a painting quite in-

directly. It is comparable to the "third" effect obtained by placing two colors next to each other, an effect which neither color itself has. Personal expression, after all, is the projection of the whole person and not merely something labeled under one title or another. The individuality of the artist's expression is something neither accurately described in words nor consciously formulated as a principle or system.

There is a difference between the type of expression usually referred to as mood, atmosphere or sentiment in a painting, and the type of expression that is more than merely expressionistic, but is inexplicably intimate in the artist's work. An intuitive working out of a composition will allow this "third," the inner life of the artist to be expressed. And it is toward this aim that the free relating of forms on a canvas is expedited by the intuitive artist, which to some measure we are trying to describe and explain specifically in the development of a painting. Design of expression is not simply a matter limited to the first organization conceived by the artist beyond which a painting is not carried, resulting in a restricting of ideas and impulses, by such a process as filling in the areas that were produced by the main divisions of the composition.

In painting, the mechanical "filling-in" of the planes with color can be especially harmful, for the painting ceases to grow. Such a process can restrict imagination and curtail a free, creative expression. The creative impulse is extremely fugitive and can be easily blocked. The maximum in organizational improvisation and richness is necessary. Complexity may result and simplification will be necessary. But it is one thing to crystallize the essence of a very rich expression in painting, bringing it to a rich distillation—and another thing to simplify too soon, and thus make the painting

barren. The fugitiveness of the innermost feelings and ideas of the artist takes maximum liberty for projection.

In figure 115, oil colors were used. A relationship between plane A and plane B was conceived within the general counter-clockwise movement already created. The white planes in the still-life itself, figure 114, show the approximate conceived and felt spatial positions of the planes in the picture.

Figure 117 illustrates how two planes were opposed to each other, arrows A and B; their approximate position in the still-life is shown in figure 116; planes A and C. Here we see that these planes do not represent realistic forms. Instead, space movements suggested by the forms in the still-life have been interpreted by two freely placed, opposed planes. While the space was felt to move in and toward the right, the method of making the planes create this movement was to use two planes turning in opposition. They interact with each other, each making the other function. The forms in the still-life, as well as the larger space idea, influenced the sudden impulse of the artist to use these planes. They will be part of a larger complex of planes, later, which all together create the larger depth movement toward the right we just mentioned. How this will take place can be seen in figures 119 and 121.

In figure 116, a general feeling of an "in and out" movement in the still-life is designated, the right side coming forward (labeled as such in the illustration) and the left going back. In figure 118 we see how the artist translated this feeling to the canvas. Plane A was placed lower on the canvas than in the actual still-life to create the movement forward, and was related to the planes on the opposite side of the canvas forcing them into the third dimension.

Vertical lines were next added to help create large surface oppositions, figure 120.

In the course of the painting, changes were made and larger areas worked with; this method is largely an additive one, for one plane is added to another, out of which the whole grows. This whole is also changed to bring it into closer integration.

If we examine this painting at a later stage, figure 121, groupings of forms and the more obvious design relations can be observed. The arrows indicate the spatial movement and synthesis of the two complexes of planes which resulted from the numerous feelings and ideas so far developed on the canvas.

While the processes described here constitute essentially an additive method of working, each artist, of course, will work differently and individually.

Figure 122, *Nude*, by Allen Leepa, 1939. This charcoal drawing was done from a standing nude. The emotion-tension shifting was toward the left at the bottom of the picture and toward the right at the top. These emotion-tension movements were established by planes parallel to the picture plane. The spatial movement is clockwise moving down and to the right, then toward the left by diagonals and shifting verticals and then up at the left.

Figure 123, *Still Life in Yellow, Red and Blue:* by the author, 1939. The shifting is toward the left at the bottom of the painting and toward both right and left in the upper part. The half-circle shape in the center and the slanted rectangular plane at its right, direct the space down and toward the left. The right edge of the half-circle plane helps more definitely to direct this movement. The rectangular plane just to the left and touching the upper part

of the half-circle, slants and directs space towards the right and inward. This is taken up by the overlapping planes above, which carry the space movement into depth, toward the left. The result is a movement toward the left into space at the top left of the picture and a movement out, down and to the left at the lower part of the picture. At the right of the canvas, the planes build back into depth and move up at the same time. The lower left side of the canvas in contrast, moves down and forward. The canvas, while having a strong curved movement emphasizes the vertical and horizontal.

The compositional design of the painting grew from a developing relationship of planes. The still-life suggested many movements. The artist follows his impulses, realizing that any suggestions of the still-life would have to be improvised on, in terms of the needs of the developing canvas, so that the whole would develop as an integral unit. And while there was an overall awareness of the emotional intensity involved in the placement of the forms, both two-dimensionally (as shifting) and three-dimensionally (where the experiencing of the planes was felt in space) the forms developed spontaneously and imaginatively.

Figure 124, *Still-life in Red, Yellow, White and Blue,* by Allen Leepa, 1945. The still-life from which this painting was done is shown in figure 125. There is a counter-clockwise shifting, with the space going in at the right side of the picture, counter-balanced by planes turned on their axes toward the left and down, suggested by the dark drapery on the wall. Areas, shapes and movements around the objects were worked with, along with the colors and forms of the objects themselves. Linear and space movements were considered in functional relationship on the canvas regard-

less of the actual forms in the subject. The still-life was used only as a point of departure for the imagined conception of the canvas.

The upper part of the large triangular complex in the center of the picture creates an emotion-tension shifting toward the left in opposition to a movement toward the right of both the upper light areas and the lower dark ones. Within the large triangular form itself there are light areas directed in a counter-clockwise movement. An emotion-tension movement down, forward and to the left on the right side of the canvas created by the light area, helps to counter-balance forward movements on the left side of the canvas. Other forms on the bottom of the canvas also shift to the left, to create a strong opposition to the movement of the central triangle.

Figure 126, *Tree*, by Allen Leepa, 1942. This painting of a tree and a grey summer cabin is predominantly green with a black tree trunk. There was no overall shifting either to left or right, but each plane was shifted either vertically or horizontally relative to another plane, as it was suggested and experienced in nature and the demands of the composition. Verticals helped to establish the emotion-tension movement.

Figure 127, *Still-Life*, by Allen Leepa, 1947. The painting developed from a spontaneous relationship of small planes in opposition to each other. From these, larger complexes forming the main colored shapes developed.

Figure 128, *Composition*, by Allen Leepa, 1947. This painting was developed non-objectively. It is made up predominantly of curves and of the primary colors; one form followed another automatically without reference to nature. Certain areas of the canvas required color, movement, an

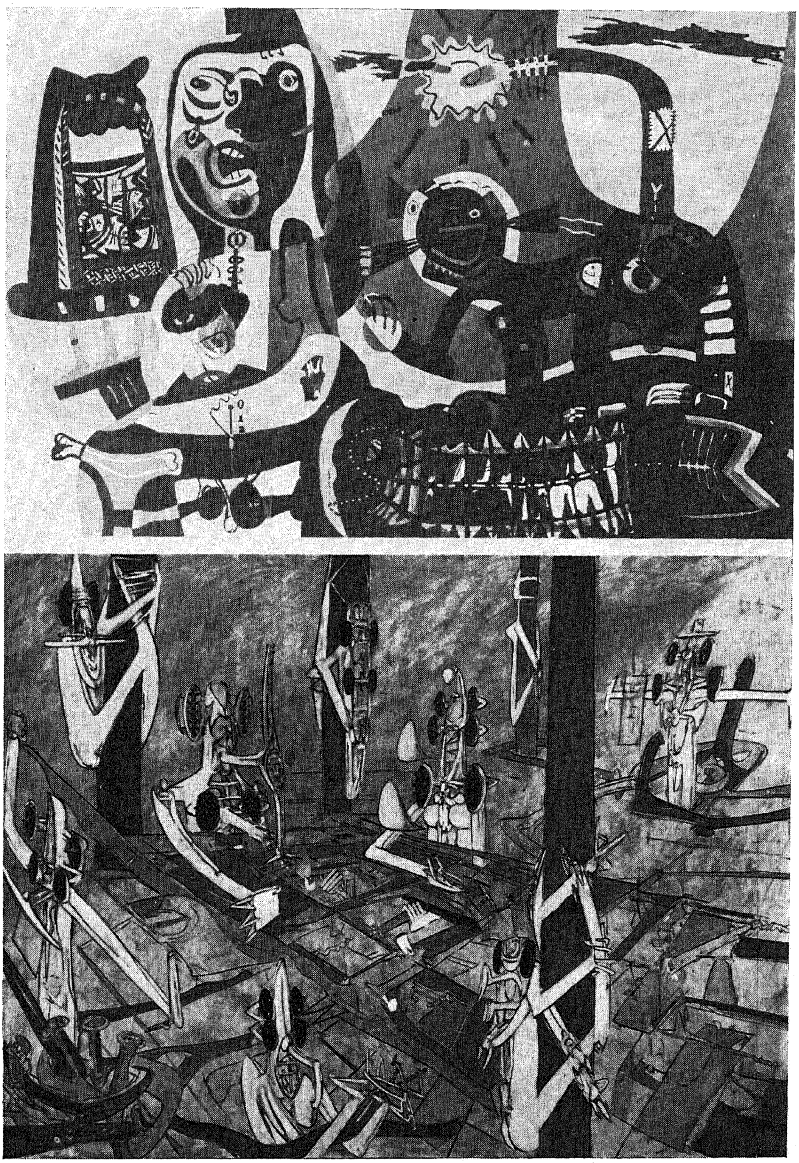


FIGURE 76 (top). Peter Busa: *Transparent Master of Ceremonies.*

FIGURE 77 (bottom). Matta Echaurren: *Accidentality.* The artists' own comments on these and the following seven paintings are on pages 182 to 197.

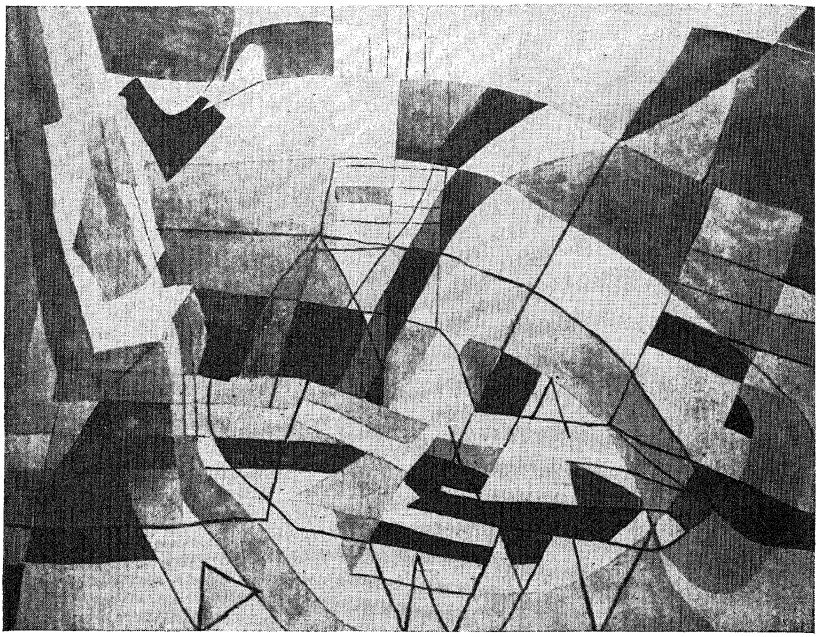


FIGURE 78 (top). Perle Fine: *Pleochromatic Composition.*

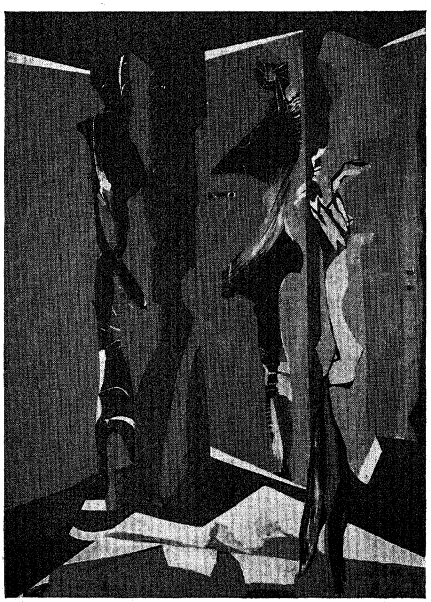
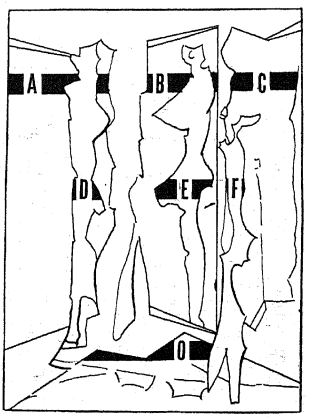
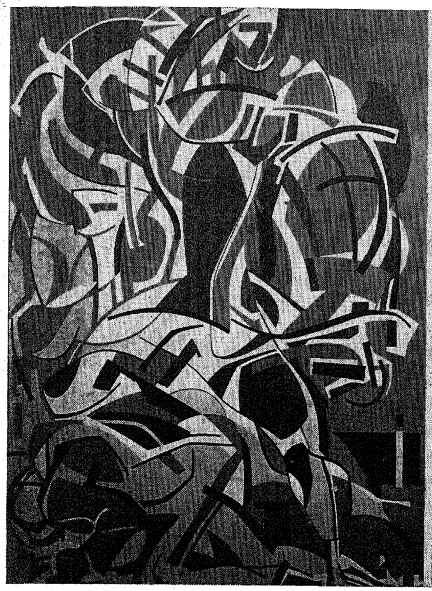
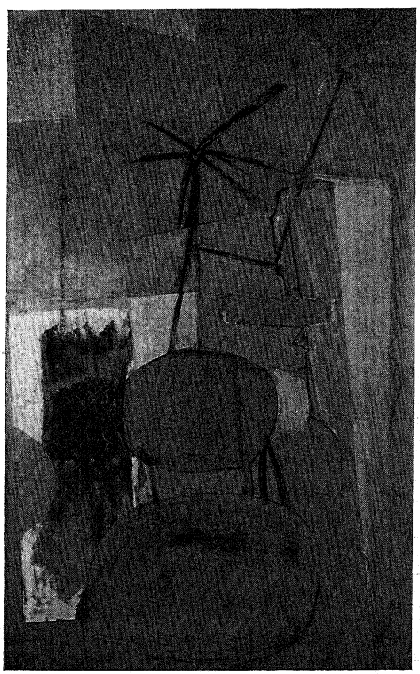


FIGURE 79 (bottom). Balcomb Greene: *Black Angels.*

FIGURE 80 (lower right). Analysis of *Black Angels.*







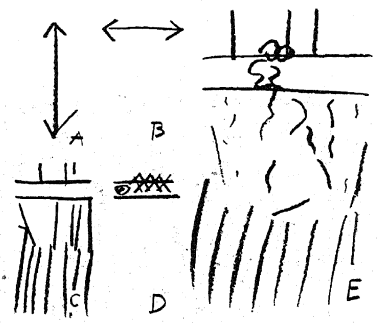


FIGURE 81 (upper left). Carl Holty: *Blue Warrior.*

FIGURE 82 (upper right). Karl Knaths: *Fruit and Table.*

FIGURE 83 (middle right). Analysis of *Fruit and Table.*

FIGURE 84 (lower left). Robert Motherwell: *Person with Orange.*

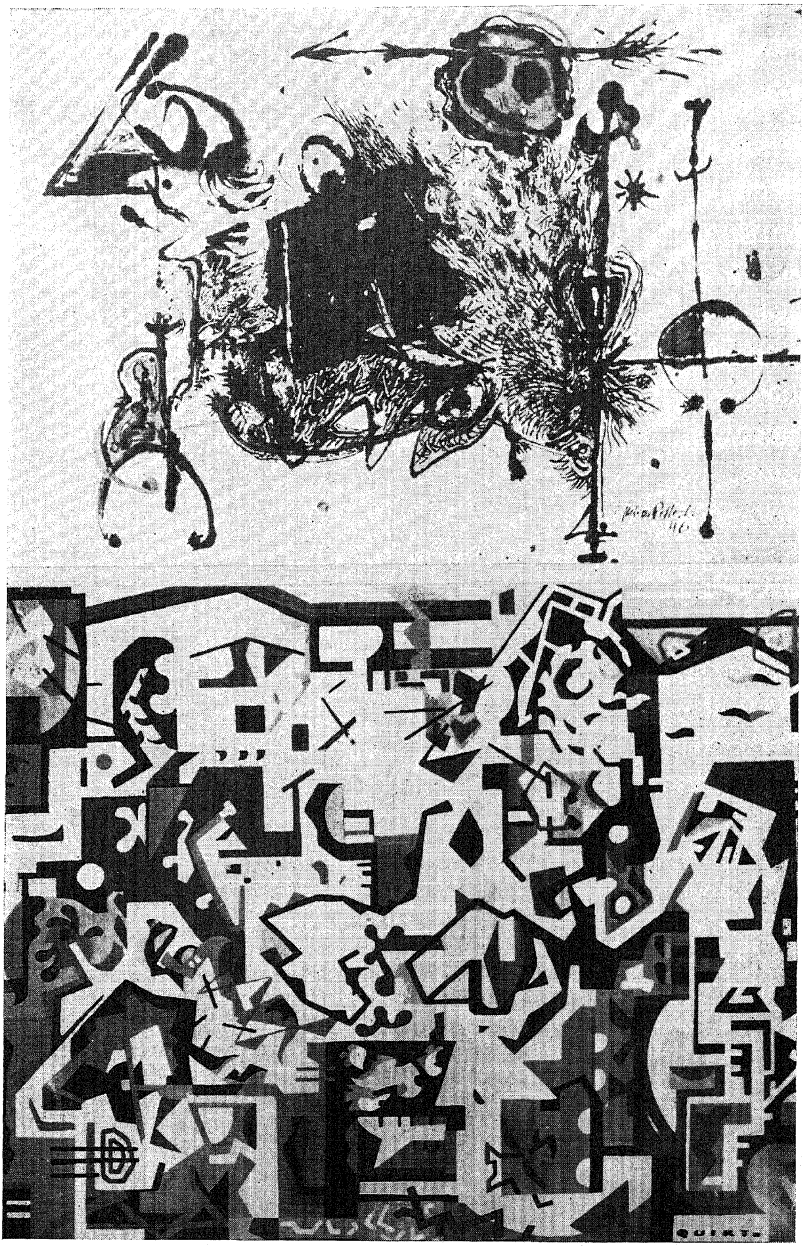
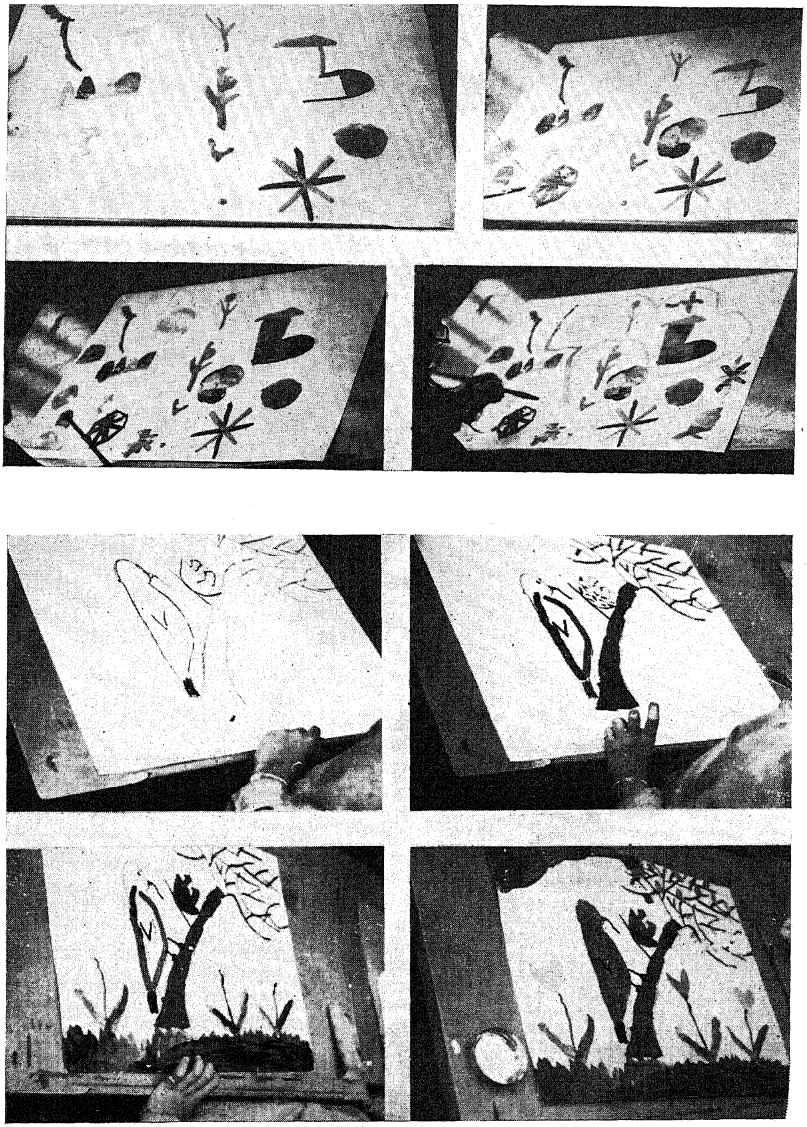


FIGURE 85 (top). Jackson Pollock: *Totem II.*
FIGURE 86 (bottom). Walter Quirt: *Origin of Life.*



FIGURES 87-90 (top four). Stages in development of a gouache painting by a child six years old.

FIGURES 91-94 (bottom four). Stages in development of a tempera painting by a child eight years old. A child frequently keeps his entire painting area developing at the same time, balancing one form against another, adding forms and colors spontaneously, intuitively, automatically.

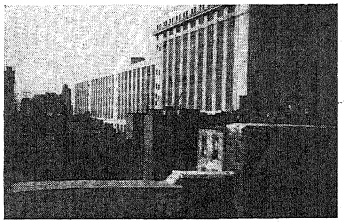
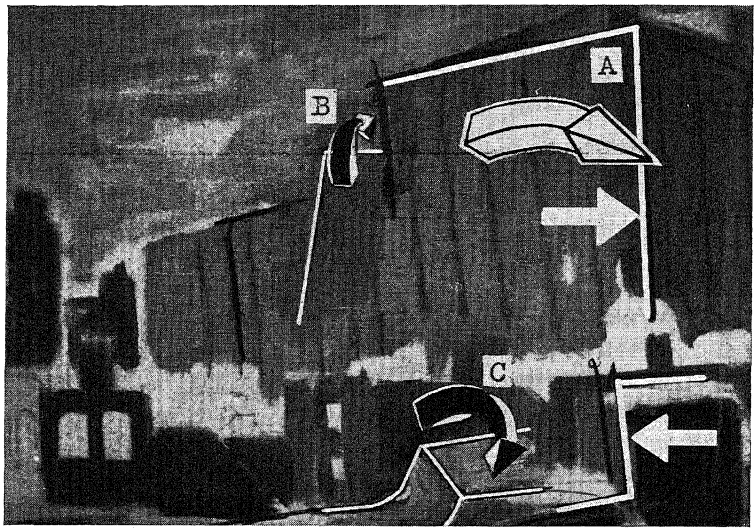
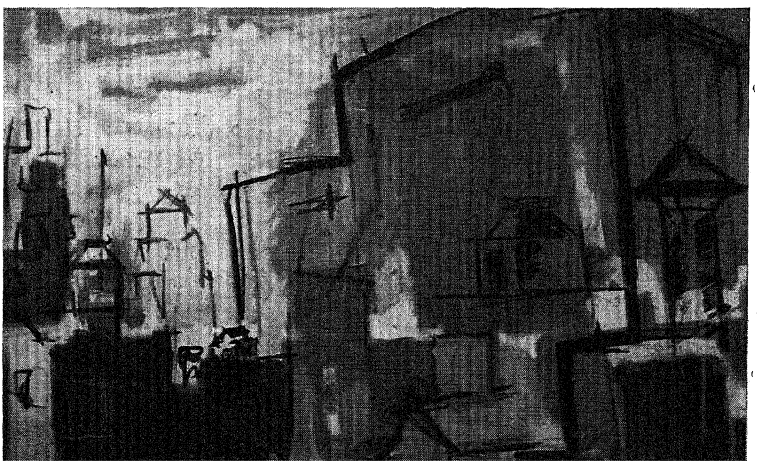
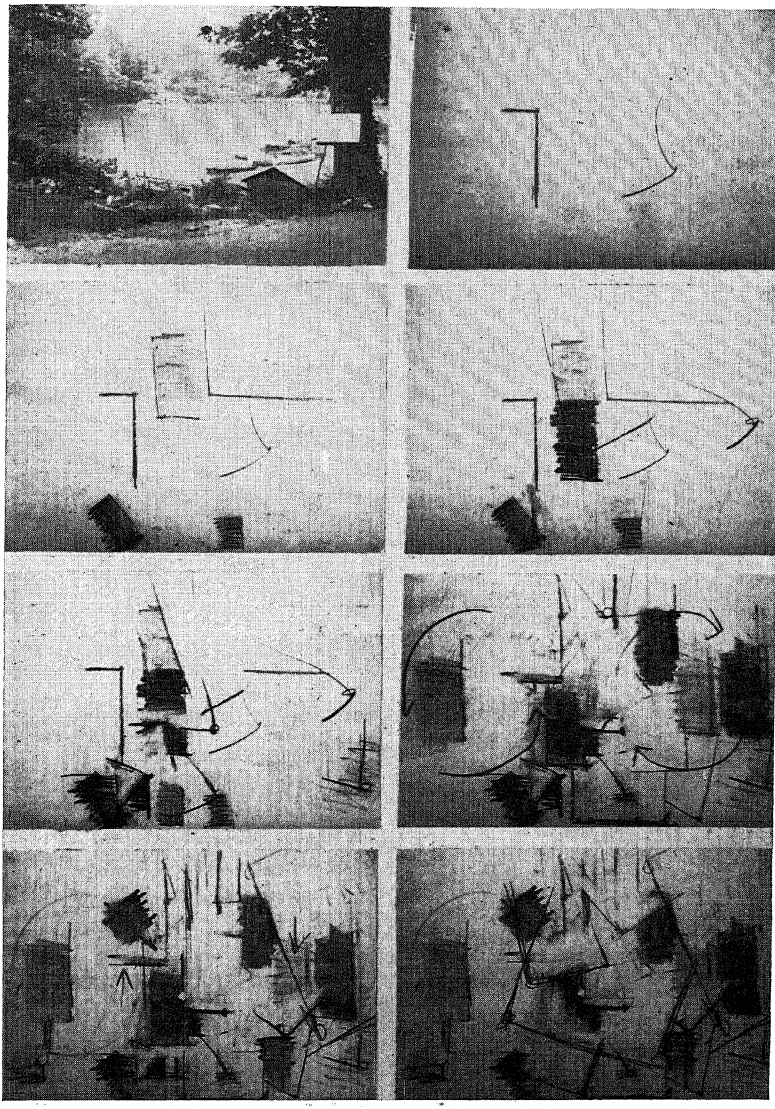


FIGURE 95 (left). Photograph of scene from which unfinished painting below was begun.

FIGURES 96-97. Two stages in the development of a realistic painting that has first been realistically blocked in and then changed to create surface and three-dimensional movement oppositions. (See pp. 208-209.)







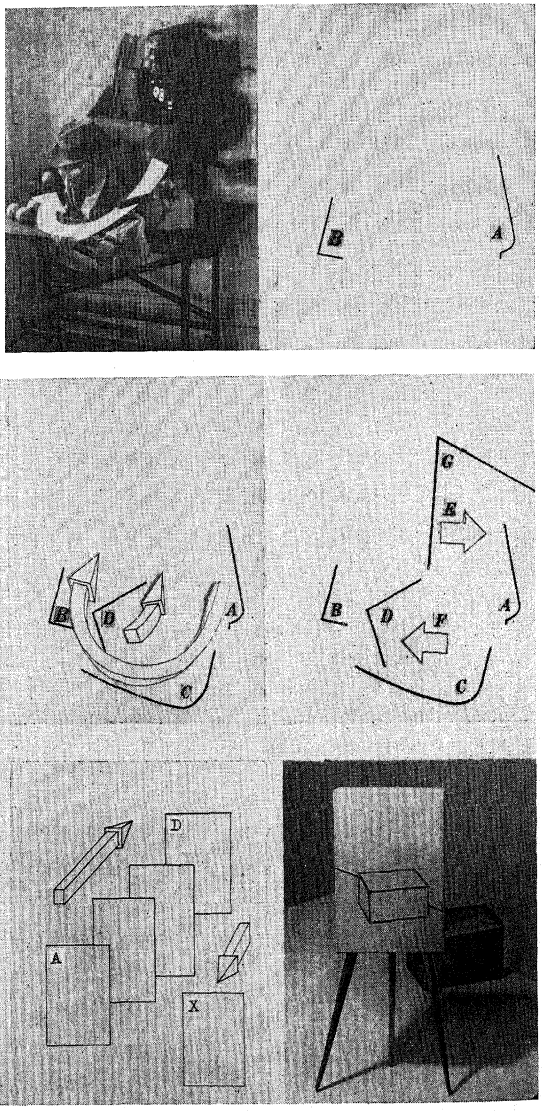
FIGURES 98-105. From left to right, stages in the development of an abstract drawing; and the scene with the location of the easel from which it was painted; by Allen Leepa.

FIGURES 106, 107 (top).

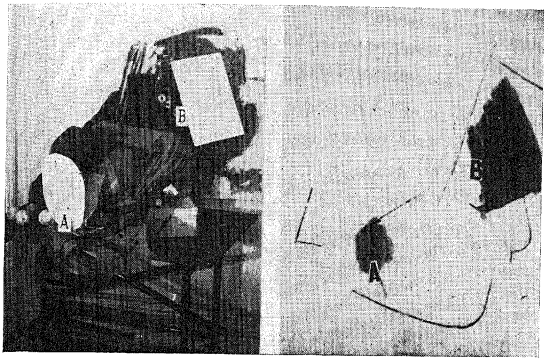
FIGURES 108-110 (middle).

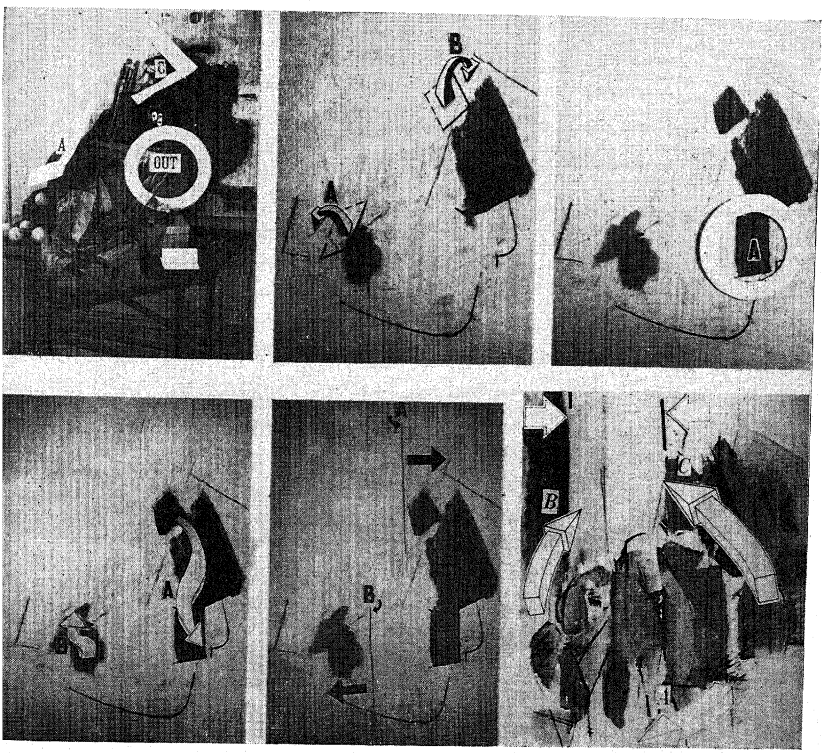
FIGURES 111-113 (bottom).

The development of an abstract painting and the still-life from which it was painted, showing some of the planes and movement concepts used, both actual and felt, as the painting developed in relation to the still-life; by Allen Leepa.



FIGURES 114, 115 (top).
FIGURES 116-118 (middle).
FIGURES 119-121 (bottom).





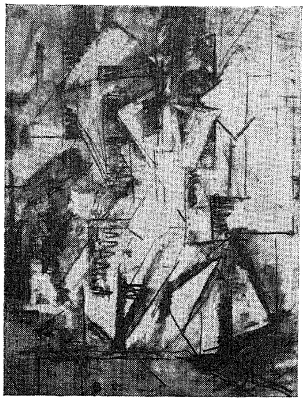
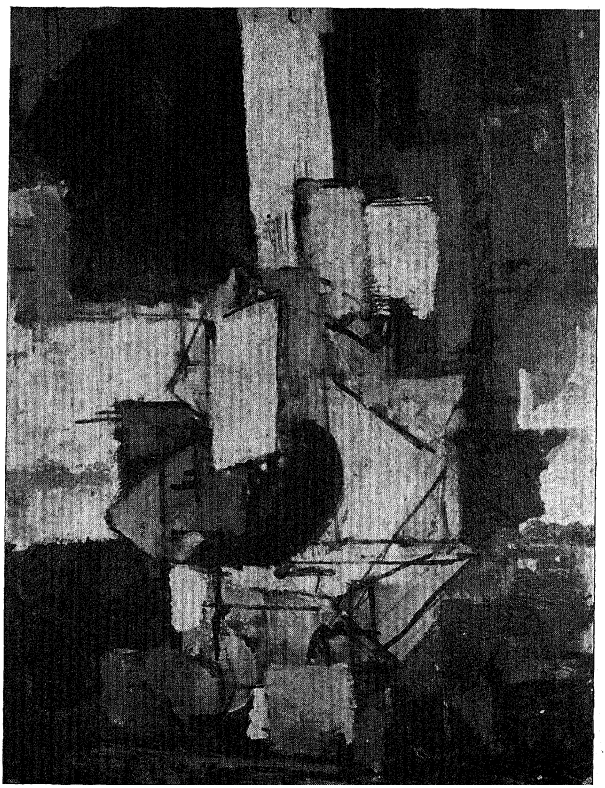
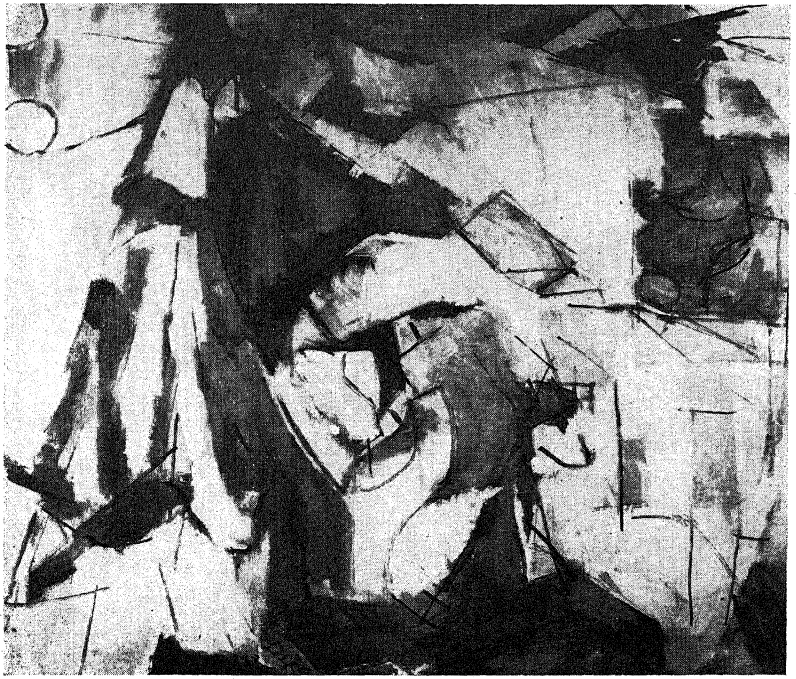
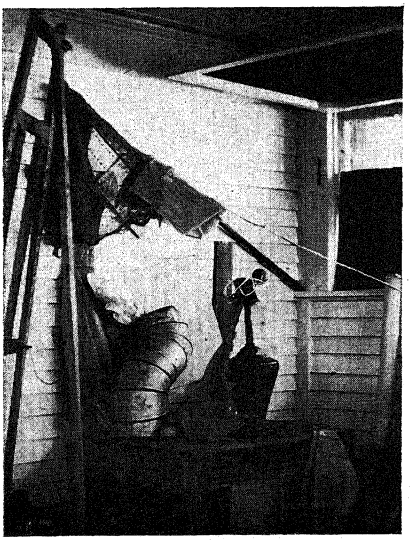


FIGURE 122 (top). Allen Leepa: *Nude.* This abstract charcoal drawing grew out of the artist's concern with movement relationships, and not with the realistic appearance of the model—which was used as a point of departure.

FIGURE 123 (bottom). Allen Leepa: *Composition in Red, Yellow and Blue.* A still-life of fruit, bottles and colored paper was the point of departure for the development of interrelated design elements, conceived two- and three-dimensionally.







FIGURES 124, 125. Allen Leepa: *Still-life in Red, Yellow, White and Blue;* and the scene from which it was painted. Background and foreground areas and planes have been freely related, not to copy the still-life, but to express the artist's interaction with it in terms of movement relationships of forms.

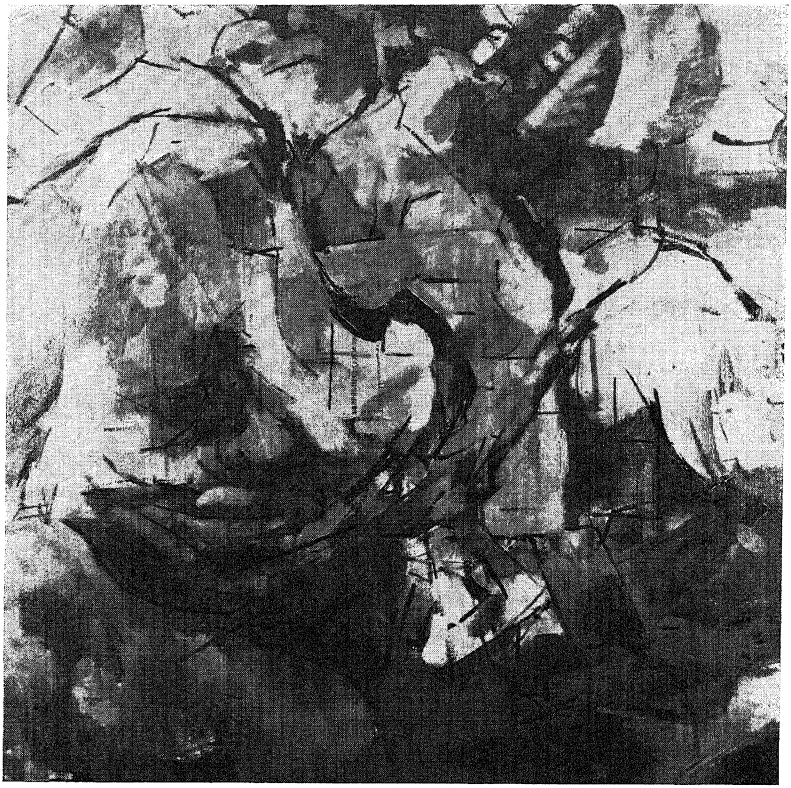


FIGURE 126 (top). Allen Leepa: *Tree.*

FIGURE 127 (lower left). Allen Leepa: *Still-life in Green, Brown and Red.*

FIGURE 128 (lower right). Allen Leepa: *Curved Composition in Yellow, Red and Blue.*

interpolating form as the canvas developed. No sooner was one form added than another was needed elsewhere; and when that was put in, a new need developed to tie the canvas together, break up a shape or emphasize the main movement of the picture. The design, in other words, was not settled till the last color was added. Toward the end of the work on the painting, the planes building up and back in space at the right, as shown by the angular edges meeting the ground plane at the right, were developed to create a space movement into the right of the canvas. While emotion-tension shifting determined the positions of the forms, linear shape took a dominating role in the design from an early stage, and the artist followed along with this suggested automatic motif. The artist followed impulses as they were stimulated by what was occurring on the canvas and by automatic ideas. Gradually, toward the end of the picture more and more refinements and combinations of movements established themselves.

There are "laws" of proportion which can hinder creative expression unless they are understood and then, so to speak, forgotten. Some artists quite intuitively understand the creative process so thoroughly that such "laws" in no way limit their expression. We will find that the artist's feeling and taste, in most cases, seems to express these laws. Yet, there is a difference between realizing these ends in a painting as a result of the creative process and imposing them on the expression. There are paintings which violate all these "laws," even extremely realistic paintings, and yet do not suffer creatively.

The painting process makes the individual somewhat dependent upon his expression. When the artist puts something down on his canvas, he is partly at the mercy of this

projection. He must compromise, even subordinate other ideas and feelings, or destroy what is already on the canvas. This partial sense of dependence upon an expression, of having to "go along" somewhat as the expression itself leads, makes it appear as if the artist does not control what he is doing. This is not the question. When we realize that the creative process is not an intellectual one, but rather a "feeling out" process, we will seek to encourage and develop that feeling. The unique element in such a feeling is its evanescence. The innermost feeling, with its subtle overtones is not available until it is expressed and bared for observation. The color the artist uses, the way he sees a scene, is something very unique and personal with him. That unique expression is not merely the product of intellectualization. It is the result of free expression; and therefore the artist works with this free expression and encourages it. The artist himself cannot consciously put into words his innermost reactions to what he sees; nor need he or should he.

The solution of the canvas is something which takes place right on the canvas. There is a struggle with a formal problem. But the artist's feeling and ideas are maintained in face of the formal considerations. The artist will control the various possibilities of the formal relationships, selecting and working with those elements which bring out his original feelings and idea.

If the first process in painting is that of projection, the second process is simplification and crystallization of the expression. These processes are not separate. Typical of the first stage in the growth of the canvas is a tendency toward complexity; while in the second stage the canvas becomes more integrated and grows from complexity to simplicity.

From richness of material comes depth of idea, but from shallowness of material nothing is available for distillation.

If we are interested in a creative painting we must be prepared to meet the challenge of the numerous manifestations of this creative experience.

CHAPTER TWELVE

Guernica

"IN THE PANEL on which I am working, which I shall call Guernica, [Figures 69-74] and in all of my recent works of art, I clearly express my abhorrence of the military caste which has sunk Spain in an ocean of pain and death. . . ." [1] Pablo Picasso, one of the leading modern painters of the twentieth century made this statement in May 1937 while working on his now famous Guernica mural. This mural is as meaningful today as it was in 1937, for it speaks a language symbolic of our times.

This chapter, unlike many that preceded, will deal predominantly with the literal meaning of a painting. However, along with the subject matter explanations, suggestions as

[1] *Picasso: Fifty Years of His Art,* by Alfred H. Barr, Jr., The Museum of Modern Art, 1946, page 202.

to its creative meaning will be made and these may help us make the transition to understanding the more non-representational forms of modern art.

The Guernica mural was commissioned by the Spanish Republican government during the Civil War in Spain in 1937, for display in the Paris Exposition of that year. Picasso felt so strongly about the theme and worked so energetically, that the mural was completed in little more than a month. Though he had been commissioned in January, it was not until May 1, two days after the Basque town of Guernica was destroyed by German bombers flying for General Franco, that he began work on this mural.

The mural may be interpreted in many ways. Basically, it expresses an abhorrence for war and serves a double purpose, stating symbolically, at one level, the destruction that violence and brutality cause; and, on another level, either the triumph of the people of Spain over reactionary forces, or the method by which brutality may be eliminated in society.

The picture, figure 74, is constructed symmetrically in three parts: a triangular form in the center, and a verticality of forms on either side. At the left is a complex of forms consisting of a woman holding a lifeless baby, fitted into the curving form of a bull. In the middle section a horse, pierced by a spear is standing with its head stretched upward. To the right of the horse are two women. The upper one is leaning from a window, and only her head and an outstretched arm holding a lamp are visible. The lower, kneeling woman is part of the right side of the large triangle in the center of the picture, in the left corner of which is the head and outstretched arm of a prostrate

warrior. At the right of the picture is a figure with arms stretched upward.

We see figures in agony, such as the woman with the child, the disembowelled horse pierced with a spear, and the helpless figure at the far right, while other figures are terrified, concerned, or bewildered. The dismembered forms, the number of sharp angles, and the staccato rhythm of separate and contrasted shapes contribute to the effect of destruction. All of the forms are involved in this mass of destruction, except the bull which stands alone, emphasized by the large expanse of dark area surrounding it. It is the most composed and majestic figure in the mural, turned away from the scene, looking quietly out of the picture at the spectator.

The actions of the figures and animals take place in a stage or barnlike enclosure lit by an electric bulb, illuminating the forms below and casting sharp shadows on forms while leaving other areas of the picture in comparative darkness. The preponderance of shadowy black forms contributes a sense of drama to the whole. This is furthered by the elimination of color, for the painting is done only in black, white and gray.

What does all of this mean? What has the artist been trying to say? Two interpretations suggest themselves, one based on Picasso's statement of 1945 which he in part contradicts at a later date, and another is suggested by the mural itself. These are determined by whether the bull symbolizes brutality and the horse humanity, or whether the bull represents the Spanish Republic and the horse, military force. This mural may have more than one meaning and the artist may have had such a double intent when creating this work. (There seems to be a basic meaning

running through both interpretations, however, for the woman holding the light may represent both the need and the triumph of liberty and truth, since she is apparently a symbolic counterpart of our own statue of liberty.) The most important factor for each person to determine for himself is whether the meaning for him is convincingly created, for above and beyond the literal meaning in a work of art, are the creative ones. The artist's imagined conception in his work is part of the created form, which in turn gives vitality to literary meanings and at the same time creates its own content.

The statement by Picasso on which one interpretation of Guernica can be based was made in March 1945, shortly after the liberation of Paris during World War II. It was made in reply to questions on *Guernica*: "No, the bull is not fascism, but it is brutality and darkness . . . the horse represents the people . . . the Guernica mural is symbolic . . . allegoric. That's the reason I used the horse, the bull and so on. The mural is for the definite expression and solution of a problem and that is why I used symbolism." [1]

The use of the bull and horse brings to mind the Spanish bullfight arena in which the horse is the helpless victim of the ferocious bull. While the bull stands independent and undisturbed at the left of the mural the horse is badly mutilated and in apparent agony. It is enmeshed in a large triangular shape along with the slain warrior and the kneeling woman. It is as if these three figures are victims together. At the left the screaming woman immediately below the bull is contrasted with the feeling of superiority and brutality of the bull.

The symbolism of the woman trying futilely to illumi-

[1] ibid.

nate the scene by holding a primitive light, might possibly be that old-fashioned ideas and feelings are not enough to solve the problem. She is helpless to do anything, as if kindness and humaneness alone are insufficient. Coupled with this idea, is the significance of the texture of the mutilated horse in the center of the picture, which might be thought of as newsprint and could symbolize propaganda which confuses and misinforms humanity. This is a very broad interpretation of the meaning of the texture, for its main function may have been intended merely as a visual one. Yet, whether the texture is interpreted to be newsprint or not, the meaning nevertheless seems the same: the woman holding the light symbolizes liberty. The horse, representing the people violently struggling to free itself of entanglement, represents ignorance, propaganda or the regressive forces in society, which hold the people down. The violent struggle of the figures is held within the framework of a symmetrical design structure. It is as if, no matter how vigorously the figures struggle in agony, they are held by forces that they cannot overcome.

If we follow through the interpretation that ignorance blinds the people, the implication would then be that people need further education, further enlightenment so as not to be victims of their own stupidity which finally destroys them. Man has not been able to help himself against evil forces any more than the horse can save himself from the bull. A vicious circle is represented; the solution is not through human kindness, but through enlightenment. The individual is so highly propagandized that he does not know what is good for him, and will continue to be a victim of destructive forces until he liberates himself.

A second interpretation, and one which seems to be

more completely substantiated by the mural itself, is possible. The bull may represent the Spanish Republic triumphant over military force symbolized by the horse. The facts that appear to support this idea are the following: the traditional meaning of the bullfight to the Spanish people, for whom the bull represents all that is courageous and noble; the apparent animistic function of the spear in the horse's body placed there, it would seem, by Picasso himself; the light held by the woman directly above the head of the horse, as if to symbolize freedom; and the slain warrior holding a sword which could represent military force.

In 1947, in reply to questions again submitted to him, Picasso stated:

"But, this bull is a bull, this horse is a horse. There is also a sort of bird, a chicken or a pigeon, I no longer remember, on the table. This chicken is a chicken. Of course, the symbols . . . but it is not necessary that the painter create them, these symbols, otherwise it would be better for him to write just what one wants to say, instead of painting it. It is necessary that the public, the spectators, see in the horse, in the bull, symbols that they interpret as they understand them. There are animals: these are massacred animals. That is all, for me; let the public see what it wants to see." (This statement by Pablo Picasso was made in response to the following question submitted to him by Mr. Alfred H. Barr, Jr., of the Museum of Modern Art, through Mr. Henry Kahnweiler of the Galerie Louise Leiris in Paris on May 29, 1947: "Does the bull represent the triumphant Spanish people *or* does it represent brutality, more specifically the nationalism of the Franco government?")

This reply would seem paradoxical in view of his earlier

answers if it were not for the fact, as he has indicated on numerous occasions, that he strongly believes art should not be described, analyzed or taught, but should be experienced directly by the observer. Too often intellectual analysis becomes a substitute for the meaning which only the work of art itself possesses as experience. Art loses its meaning and becomes something else. Possibly because of the abhorrence of this intellectualization of an art work, and possibly because the work itself may have several meanings, Picasso prefers to throw the interpretation of Guernica back on the spectator—who must after all discover and experience it for himself.

An additional consideration is that the artist, unknown to himself, expresses unconscious feelings and ideas, giving to his work both direct and indirect meanings. The bull, for example, which Picasso insists does not represent Fascism, but only brutality, and which can also be interpreted to stand for the Spanish Republic, has a pointed ear which resembles an emblem worn on the military hat of Benito Mussolini's Italian fascists.

The bullfight in the Spanish culture symbolizes the tragic in life; it stands for life and death, passion, virility and courage. In the ring man tests his skill, cunning and bravery against the strength and courage of the bull; there is a battle to death between the bull and man. The bull in Spanish culture represents the most courageous and powerful of beasts and, therefore, a worthy opponent of man. The horse, on the other hand, in contrast to our own idealized concept of him as the noblest of beasts, is considered a weak animal suitable for goring by the bull.

From the first inception of *Guernica*, as revealed in the early sketches, figures 69-72, the woman, who is holding the

light, and the bull, are the triumphant forces. They are not in conflict, as in Picasso's earlier etching, *Minotauromachy,* figure 75, in which a man with the head of a bull seeks to shield himself from a light held by a child. Rather, both the Spanish Republic and justice, represented by the bull and the woman, are triumphant. It seems reasonable to assume that they both stand for a similar purpose, with the bull perhaps not only representing the Spanish Republic, but strength as well.

The horse is pierced by a spear, yet there is no figure in the picture that placed it there. The slain warrior is holding a broken sword, not the remnants of a shattered spear. The horse seems to be an animistic object, which Picasso has himself pierced as if magically to destroy it. The slain warrior, representing the military caste of Spain, is holding a military, rather than a bullfighter's sword. He is underneath the horse, completely vanquished, with his only means of defense, his sword, shattered.

To further support the idea that the horse represents the forces of evil, possibly the military caste itself, which is vanquished by liberty and justice—in several sketches for the mural the woman leaning from a window holds her light triumphantly *directly above* the horse.

In *Minotauromachy,* the etching done in 1935, Picasso used symbols similar to those in *Guernica,* and because in many ways it anticipates *Guernica,* it helps interpret the mural. In *Minotauromachy,* a bull at the right, represented as half man, leans over a horse, which supports a woman matador. The bull is warding off the rays of the light held by a young girl. At the left, a gentle-looking, partly clothed man is climbing a ladder, and, above, two figures sit dreamily watching the proceedings.

The symbols in this work seem to stand for various classes, ideas and forces in society. This etching might be interpreted as a comment on the aggressive and regressive trends in man and society, with man's aggressive nature as the constructive force which needs intelligent guidance. At the right of the picture the bull and the horse seem to represent force and brutality, while at the left the climbing figure and spectators may stand for escapism and the *status quo*. The child apparently symbolizes truth. The bull appears to overpower the military, represented by the matador holding a sword. The fact that the matador is a woman seems to emphasize the essential weakness and eventual defeat of this form of force. The fact that the sword she is holding is pointed at the horse, her main support, apparently reaffirms this. The bull, in other words, represents a healthy aggressive virility on the part of man, for he defeats the military caste, but because he is unenlightened, the light of truth is overpowering, and he, therefore, shields himself from it.

Whereas *Minotauromachy* is a commentary on what does exist, *Guernica* is an allegory. In both, the idea of the strength and triumph of truth and justice is symbolized. In *Minotauromachy* there is a dreamy mystical feeling, due in part to an atmosphere of light and dark and the sense of solitude among the figures; while in *Guernica* there is a dynamic and dramatic quality.

In both of these works Picasso uses a more direct symbolism than in many of his other works. Yet they seem to portray more about the artist than the symbols convey. Picasso, as a Spaniard, has both a conscious and subconscious relation to the events in Spain. Symbolism in a painting is both conscious and subconscious in origin. And

the conscious symbols have strong affinity to subconscious forces. The strong emotional feeling attached to the symbols can be attributed in part to their subconscious appeal to the artist and the spectator.

The sketches leading up to *Guernica* give us some insight into how the work developed.

The first sketch, *Guernica—Composition Study I*, figure 69, is only the roughest schematic representation of his idea. Interesting to note is that the space direction into the third dimension is diagonal toward the left, which is similar to the final sketch on the mural itself, before painting began, figure 73. The planes creating this movement are parallel to the surface of the canvas and form the structural basis of the picture. *Guernica—Composition Study II* (not reproduced) shows two scenes, the upper again representing the same feeling as the first sketch, while the lower shows individual forms for the first time definitely delineated, with emphasis on a more linear surface relationship of forms. *Guernica—Composition Study III* seems to substantiate this space idea, for forms are based on imaginative, rhythmic line relationships, emphasizing the flatness of the canvas. In the next two composition studies (not reproduced) which are more complete, done on May 1st and May 2nd, Picasso has more clearly indicated how the symbols were to be used. The comprehensive composition study done on May 9th, figure 71, has a greater number of forms than before; there is a greater sense of destruction, a stage-like space and a combination of abstract and realistic forms; light and dark are used, and the whole has taken on a dramatic, deathlike and wholly destructive effect.

While Picasso was making compositional sketches, and even after he had put a preliminary drawing on his canvas,

Guernica, 1st state, May 11, figure 72, he created numerous sketches of isolated elements in the mural. For example, the compositional study, *Hand with Broken Sword,* (not reproduced) shows the slain warrior's hand, which very expressively conveys, even in this detail, the agony of the soldier. Fingers are twisted out of position, clasping the sword handle; and the whole is simply and powerfully designed. *Woman with Dead Child,* (not reproduced) a sketch done on May 28, while the mural was in progress, very expressively creates the suffering of the woman holding the child, who is pierced by an arrow. The compositional design is very different from that finally evolved for the woman and child under the bull in the mural. The creative and emotional vitality of the artist can be realized in this sketch and in the way he works out his feelings, constantly changing his forms and trying to express his emotions as powerfully as possible. Picasso did not copy either of these sketches in the mural. They served rather as means of projecting his feeling, as if he needed these drawings for purposes of exploring and intensifying them, perhaps at the same time helping himself become more fully acquainted with the potential expression his subject matter would suggest.

In the first drawing that was placed on the canvas the space structure moves diagonally to the left into depth, at the same time that an imaginary frontal plane has been created. Abstract structural planes help to create this frontal plane, and help bring the forms in depth back to the surface. Compare this preliminary stage of *Guernica* with the last painting and notice how the whole has changed. In the final painting the scene takes place indoors, the bull has been represented at the far left, the horse's head is placed

high, and the head of the slain warrior is placed toward the edge of the picture. Notice, too, how forms have been altered as a result of the change in the artist's conception and the method of execution. In the final painting the abstract planes now become emphasized. In developing this picture, Picasso worked in large areas of black, white and grey, some of which changed along with the shapes already drawn. At the same time entirely new ones developed. Here the artist has worked with an overall plan but constantly changed and developed and enlarged on it.

In analyzing the two-and three-dimensional movements of the mural we find that the numerous forms comprising the large triangular shape in the middle of the picture direct the three-dimensional space diagonally into depth from left to right in a counter-clockwise direction. The forms closest to the spectator are below the horse and it is through these that we are led into the picture. The slain warrior, horse and light triangular plane to the right of the horse, create the diagonal space movement into depth. The counter-clockwise movement is created by the plane cutting across the body of the horse, by its tail, by its head, by the arm clutching the sword, by the kneeling woman, by the light triangular plane and by the woman holding the light. To balance the space movements one against the other, the horse's head directs space forward from right to left, while the arm directs space forward from left to right. The edge of the light plane cutting across the horse's body from the man's head at the left to the base of the horse's neck, shifts down and right at an angle, and is opposed by a movement up and to the left directed by the position of the horse's head, the lamp and the electric bulb.

In the left portion of the mural, the circular movement

of the figures of the bull, woman and child depends upon the interlocking and opposing movements based on the directions of the light masses, the linear directions of the edges of the forms, and the directions of areas behind and between the forms. At the right the figure of the man balances the tri-part design.

This mural was created to convey a message. How well does it succeed, and to whom is this message directed? Picasso could have made his forms more realistic as he did in *Minotauromachy*, yet he chose in the final version of the work to keep them semi-abstract. Apparently he felt that this way of presenting his work better served his purpose. The mural has a cartoon-like quality. A cartoon serves to present a forceful message, and its forms represent persons and ideas, and are often distorted; it is quite often symbolic and its message is direct and simple. But while using cartoon-like forms, Picasso presents a message that is complex, though direct. At the same time the clarity of the objects as realistic forms is subordinated to design and abstract planes. One is forced to search for the meaning of the images and symbols used at the same time that attention is focused on the vehicle of communication. The relation between the two, the nature and importance of contempory art and perhaps the very important relation between aesthetic experience and the world in which we live is emphasized. Because there is not a very simple literary interpretation of *Guernica* it cannot be easily pigeonholed into one of the accepted concepts and thereby easily forgotten. Rather, it offers a challenge. Apparently it is the very meanings accepted so readily by many persons that Picasso wants to challenge. And it is to those who will make the effort to understand its message that the mural addresses itself.

But even more important than its message is the creative concept of the work. Does it convey strong emotional meanings? Is it a vital statement by a contemporary artist? Does is seem to embody the crisis and tempo of the present-day world? Does it live as a creative work of art? These are the questions that you must determine for yourself. Perhaps you will find that the answers to them depend more on the emotional meanings that the mural has for you than on its literal meanings. If so, new directions in the *experiencing* of art may suggest themselves to you.

Conclusion

THERE ARE two fundamental considerations to be discussed in summary: the basis of art and the meaning of art. The basis of art is an understanding of the formal problem founded on an organismic interpretation of experience, rather than a mechanistic interpretation. Then the formal problem does not interfere, but becomes an important springboard for further growth. The artist is able to express himself freely and follow his intuitive feelings and his subconscious psychological self, both so important as creative guides in art.

Art is based on emotions. We must respond emotionally to a painting before we discuss it. We react to a work of art before our minds decide on its nature. While our mind helps to free and sharpen our emotional reactions and par-

ticipation in a work of art, it cannot become a substitute for our experiencing of it. While a great deal of personal struggle marks our efforts to come to grips with ever deeper values and meanings in art, while many paths are explored and many trials and errors are made in seeking to create or appreciate art works, the type and value of each personal discovery, the selection and ordering of them, are determined by whether they increase our emotional growth in art experiencing. Those that do not are discarded; and those that do, become part of our emotional reaction patterns. Feeling, in other words, is the final test of what we do and think as appreciators and creators of art.

Creation and appreciation are basically similar, because all of those things that we mean by experience are fundamental to both. Interaction between the individual and a medium in a continuous and growing cycle is necessary. The act of appreciation and the act of creation are different insofar as appreciation involves immediate responses to already established relations in a totally formed work of art, while creation has to give concrete form to impulses; the relationships of elements on a canvas which these impulses control are less fixed and more in the process of becoming. While appreciation takes account of what the individual spectator brings to a work of art (responses to it conditioned by the individual world of the spectator) the work itself, nevertheless, is made up of fixed relations of elements. In creation, on the other hand, both the painting and even the world of the artist can be in a state of flux, especially insofar as the composition of the painting may be in a state of flux. Strictly speaking and in a limited sense the artist's world is fixed in that it needs only to be revealed and is already in existence within the artist, formed by his ideas and feel-

ings. More broadly speaking, however, nothing is established definitely until the painting is completed. Even then, of course, it goes on changing according to the spectator who views it. This rather fine distinction between relatively fixed and variable factors in the work itself and the appreciation of its creation, becomes significant when we realize that while both the acts of appreciation and creation are fundamentally similar, creation is more exploratory, more commital, more self-evocating than appreciation, in the sense that less definite relationships of forms have been established, for when they are established they mark in some measure the boundaries within which experiencing of and participating in the art works take place. And to the degree that it is a more participating type of act than appreciation, creation is a more active and more intense act. It is an act that gives form to the most subtle, fugitive and inner forces that exist; it is a more concrete and positive type of self-revelation than appreciation; there is an assumption of responsibility for the revealing of not only the obvious but of something that is difficult to reveal: the forces of which the world is made up, and deep, meaningful experience.

Both appreciation and creation are highly creative activities involving intense participation, discovery, continuous activity and growth. One is both master and novice, critic and learner, setter of standards and searcher for their meanings, builder and reconstructor, adult and child, in both activities. The fundamentals on which appreciation and creation are based are so similar that in emphasizing the creator's role in this book, the more exaggerated aspects of creative appreciation have been thrown into sharper relief than if appreciation itself had been discussed.

The ostensible meaning of art has been different in each

era. Formerly, the artist painted for the adornment of churches and palaces and according to the dictates of patrons. The modern artist finds himself in quite a different position, since he no longer has to conform to the tastes of a patron. The difference in the resulting work is very marked. The contemporary expression emphasizes the individual and his inner world. The content created by the modern artist is profound. In eliminating the emphasis on the outward appearance of the natural world, he may now exclusively concentrate on and express his inner world and its forces.

The crux of the creative act seems to lie, then, in this complete freedom from superimposed ideas and conventions: the artist can focus his attention on expressing himself according to his inner needs. In this way new forms and directions may evolve, which can be experimented with, evaluated and exploited. Although it seems that each artist is concerned with his own personal expression, actually if his work has integrity, if he is reaching fundamental forces within himself and raising to consciousness what has not been conscious before, he is developing an expression for all of us. We find ourselves in his work, we are brought face to face with new ideas, new emotional responses.

Although there are many schools of contemporary expression: abstractionism, non-objectivism, automaticism, surrealism, magic realism, symbolism, etc., one basic fact seems true of all of them. They are concerned in various degrees, and in various ways with the inner world of man, his ideas and feelings; and the artist in expressing this inner world releases fundamental forces of human behavior and social tension, and creates his own symbols of expression. In a sense, there is a highly individualistic trend today,

perhaps more so than ever before, since each artist's work is different both in the means of expression and in the symbols he creates. Perhaps, therein lies the great opportunity for freedom to follow imagination, fantasies, psychological trends in a more direct art.

In attempting to express ever deeper and more powerful emotional experiences, the folklore, the magic, the symbolism of a people is used in its art. The Freudian interpreter finds common symbols in mental habits, in actions and in dreams. Similarly there are parallels and types in poetry, in drama, and in art generally. All are manifestations of the metaphorical mind. The process of thinking in symbols is a natural one. The problem of psychical living is to bring together and merge the pleasure and reality principles; to live out urges, but still attain a life of reason. When the artist has the courage to follow where his libido leads, he can create with force and originality.

The meaning of art is created by the artist's attitudes, his thoughts and behavior. When his attitudes are profound, and his searches for means to express himself reach down into fundamental forces within himself, he produces a more profound art.

With the freedom and personal expression that exists today, the more profound the art and the more personal its forms, the more difficult it may be for us to understand. We are no longer able to orient ourselves in terms of our relationship to the natural world, for the forms of the artist may not be a representation of the natural world. The artist produces a different art from the past; not only are the relationships within the work original and unique as in all work of art, but the very subject matter and forms and symbols used in interpretation may be unique with

him. The work of Picasso, Miro, Mondrian, Klee, to name a few modern masters, reveal to us an individual expression in art. Their work is the result of an interaction between the subconscious impulses and a conscious searching for means of expression which would liberate inner forces and personal means of expression. In his completed work we find a picture of his own personality and development, and the development of his art expression.

How can we follow and understand the highly personal expression of the artist today? How can we enter into this strange work where symbols and forms are so different from anything we have seen before? The answer seems to call for somewhat the same development as the artist himself goes through. The advantage for us in doing so lies in the fact that we will not only enrich our aesthetic life, but, in some measure, free our own emotional and psychic energies. We will not only see the meaning of the art form, but its cultural significance will become real. It is incumbent upon us to have an unprejudiced mind and an understanding of the place of modern art in the history of art. When we realize that the direction of art is changing in our day; that emphasis is on experiment and "in finding" (Picasso), we will be better equipped to understand modern art.

Not all work will appeal on the same basis to everyone. Some persons will have a more spontaneous response to the lyricism of Miro, to his fluid forms and beautiful color, to his romantic emotionality. Some people will not be drawn to the more brutal aspects of the work of Picasso. But if they can appreciate the highly experimental temperament of Picasso that reveals the structure of his art to us, they can be led to understand his contribution better.

What we respond to spontaneously, depends upon our

attitudes and temperament. Some of us lean toward the romantic in art, some to the classic, some to the lyric. Each school is represented in modern art, and we each find our own. But if we do not discard the rest, although we may not feel as direct a response, we can derive a great deal from its study. We can understand the tempo of our times better; and our own selves, since we are all part of the canvas of today.

Art stems from meaningful experience. Each artist has something different to express, regardless of the school to which he belongs. It is important that he make his statement clearly. This is not often easy, because what he has to say is not often easily expressed or rapidly brought to maturity. To shut ourselves off from all those art statements that seem to differ from what we consider important, is to cut off important expressions and art meanings. To do so is to forget the very basis of art. If, instead, we seek to appreciate what each artist has to say, we can enjoy many different art personalities, many different art expressions, many different feelings, and enter into the world of art as broadly as possible, following new clues and reorientating and growing with the creative discoveries that other human beings like ourselves are contributing to our understanding of life, society and our culture.

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